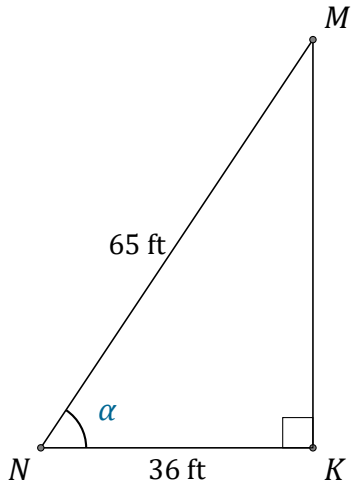


# Cosine Ratio (A)

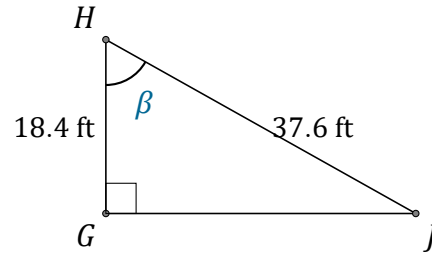
Name: \_\_\_\_\_

Date: \_\_\_\_\_

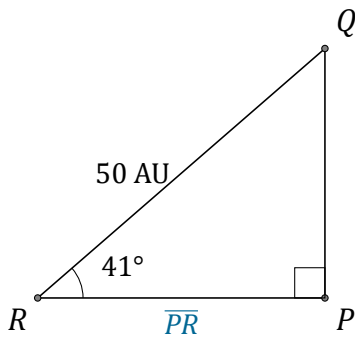
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



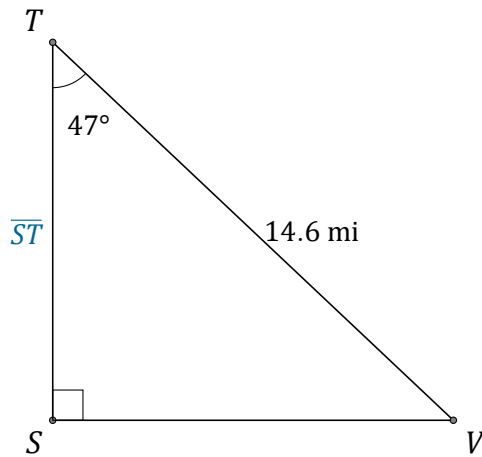
$\alpha = \angle KNM =$  \_\_\_\_\_



$\beta = \angle GHJ =$  \_\_\_\_\_



$\overline{PR} =$  \_\_\_\_\_



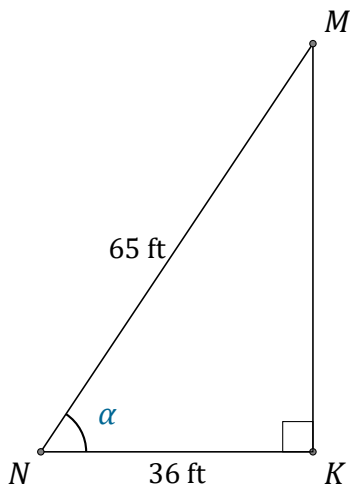
$\overline{ST} =$  \_\_\_\_\_

# Cosine Ratio (A) Answers

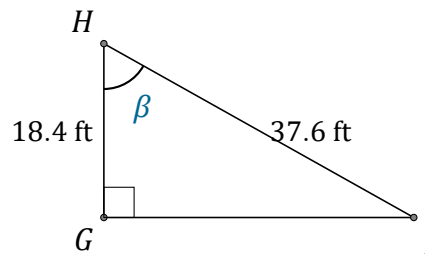
Name: \_\_\_\_\_

Date: \_\_\_\_\_

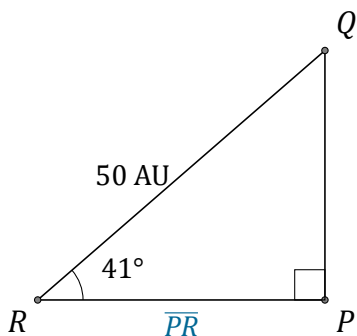
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



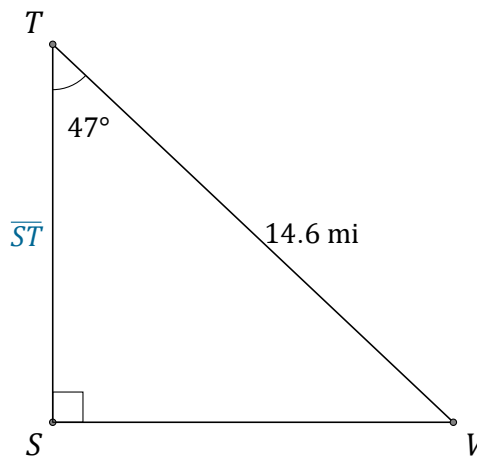
$$\alpha = \angle KNM = \underline{56.4^\circ}$$



$$\beta = \angle GHJ = \underline{60.7^\circ}$$



$$\overline{PR} = \underline{37.7 \text{ AU}}$$



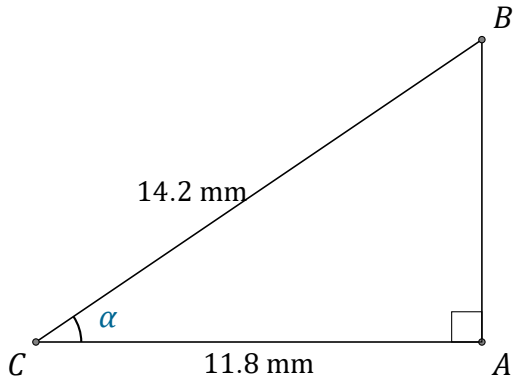
$$\overline{ST} = \underline{10 \text{ mi}}$$

# Cosine Ratio (B)

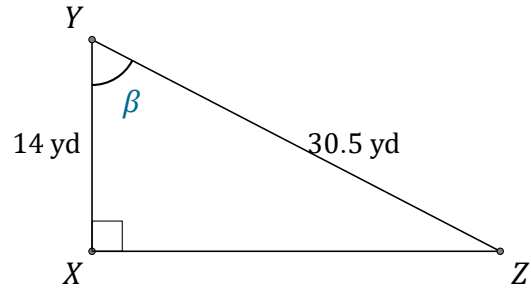
Name: \_\_\_\_\_

Date: \_\_\_\_\_

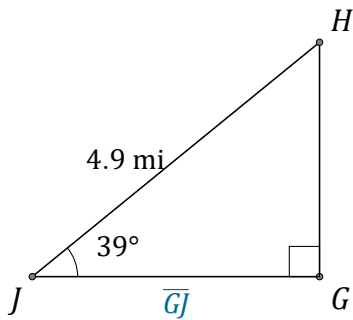
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



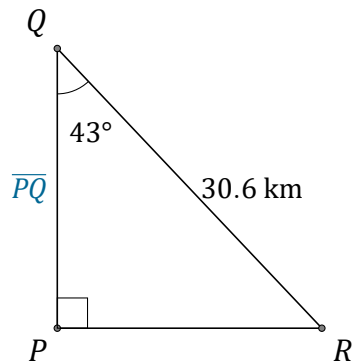
$\alpha = \angle ACB =$  \_\_\_\_\_



$\beta = \angle XYZ =$  \_\_\_\_\_



$\overline{GJ} =$  \_\_\_\_\_



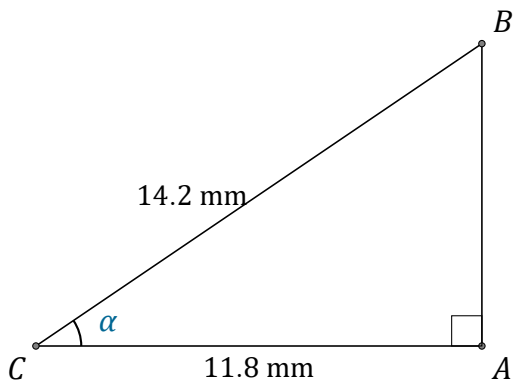
$\overline{PQ} =$  \_\_\_\_\_

# Cosine Ratio (B) Answers

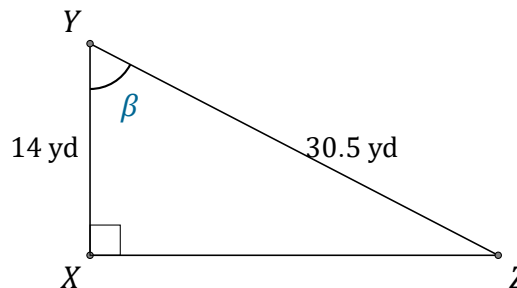
Name: \_\_\_\_\_

Date: \_\_\_\_\_

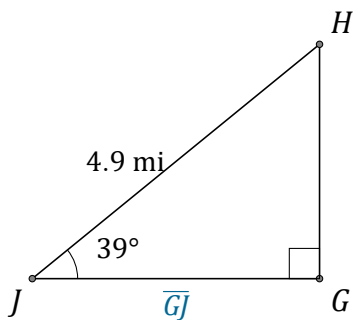
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



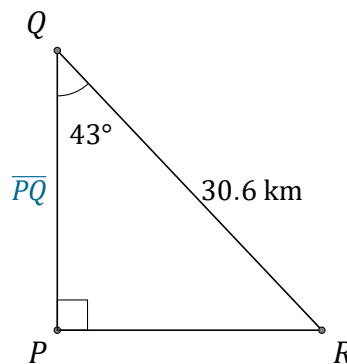
$$\alpha = \angle ACB = \underline{33.8^\circ}$$



$$\beta = \angle XYZ = \underline{62.7^\circ}$$



$$\overline{GJ} = \underline{3.8 \text{ mi}}$$



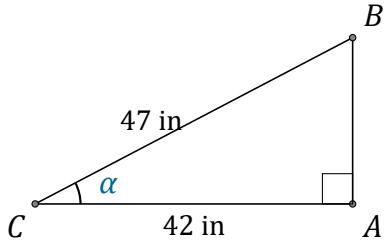
$$\overline{PQ} = \underline{22.4 \text{ km}}$$

# Cosine Ratio (C)

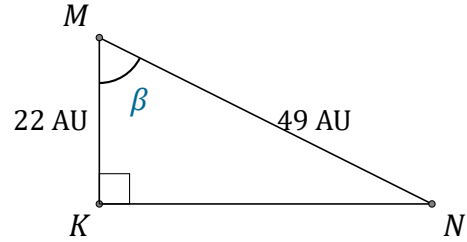
Name: \_\_\_\_\_

Date: \_\_\_\_\_

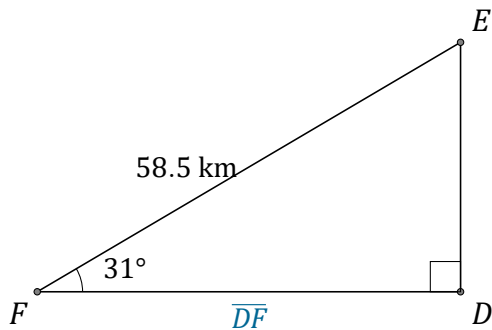
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



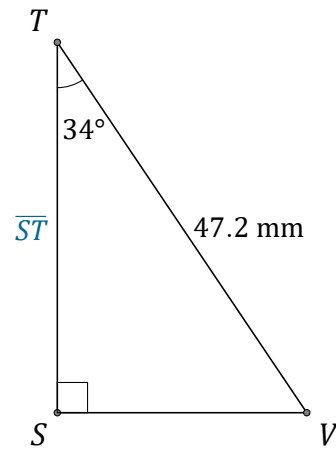
$$\alpha = \angle ACB = \underline{\hspace{2cm}}$$



$$\beta = \angle KMN = \underline{\hspace{2cm}}$$



$$\overline{DF} = \underline{\hspace{2cm}}$$



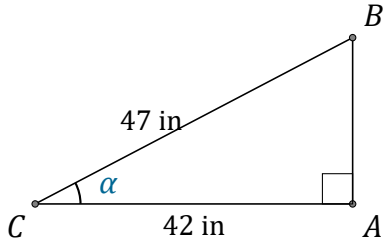
$$\overline{ST} = \underline{\hspace{2cm}}$$

# Cosine Ratio (C) Answers

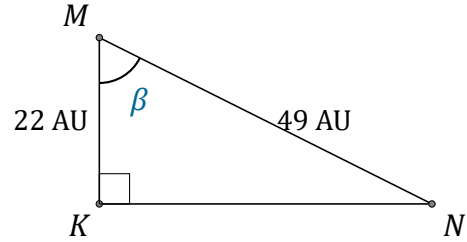
Name: \_\_\_\_\_

Date: \_\_\_\_\_

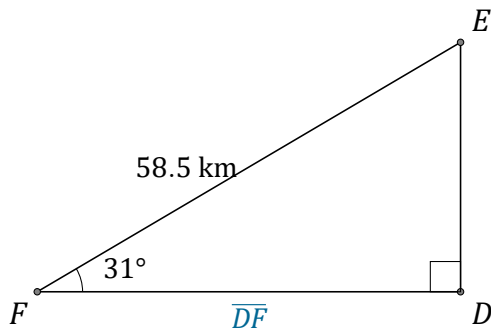
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



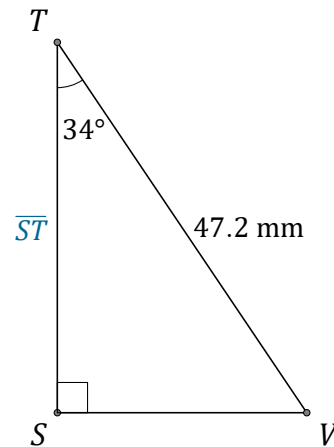
$$\alpha = \angle ACB = \underline{26.7^\circ}$$



$$\beta = \angle KMN = \underline{63.3^\circ}$$



$$\overline{DF} = \underline{50.1 \text{ km}}$$



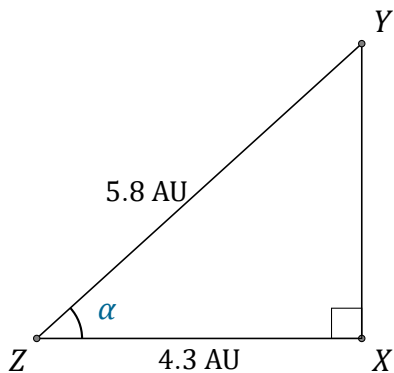
$$\overline{ST} = \underline{39.1 \text{ mm}}$$

# Cosine Ratio (D)

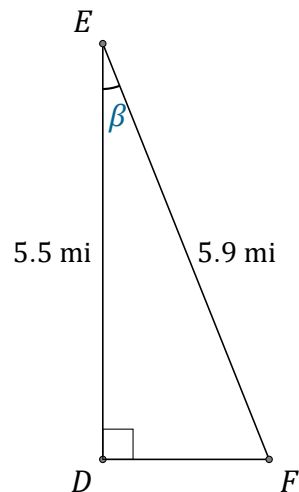
Name: \_\_\_\_\_

Date: \_\_\_\_\_

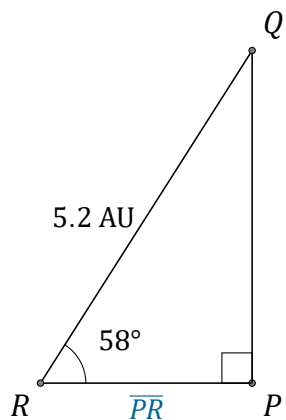
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



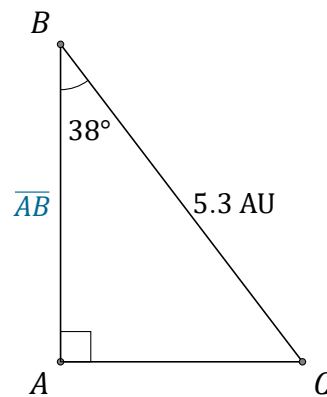
$$\alpha = \angle XZY = \underline{\hspace{2cm}}$$



$$\beta = \angle DEF = \underline{\hspace{2cm}}$$



$$\overline{PR} = \underline{\hspace{2cm}}$$



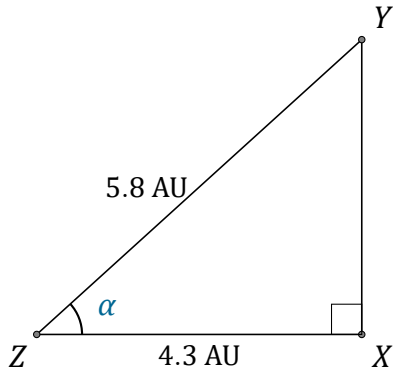
$$\overline{AB} = \underline{\hspace{2cm}}$$

# Cosine Ratio (D) Answers

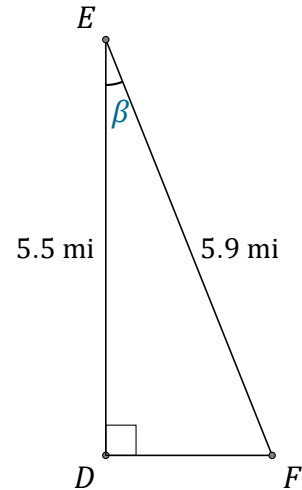
Name: \_\_\_\_\_

Date: \_\_\_\_\_

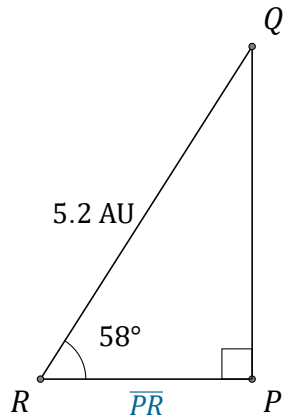
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



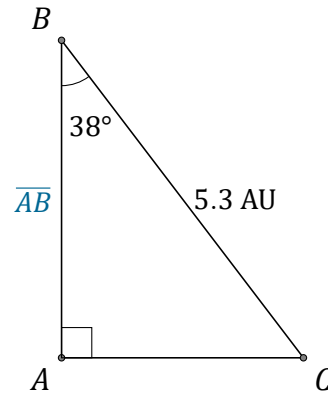
$\alpha = \angle XZY = \underline{42.2^\circ}$



$\beta = \angle DEF = \underline{21.2^\circ}$



$\overline{PR} = \underline{2.8 \text{ AU}}$



$\overline{AB} = \underline{4.2 \text{ AU}}$

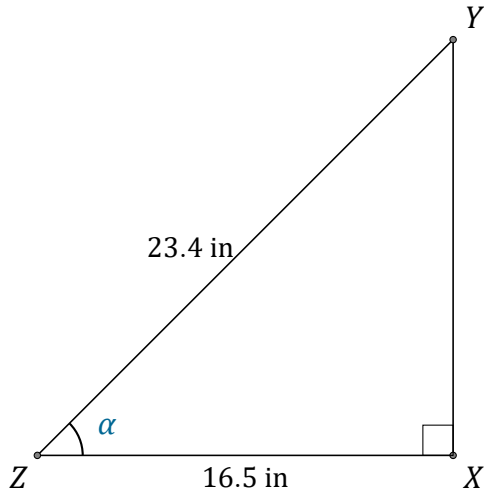


# Cosine Ratio (E)

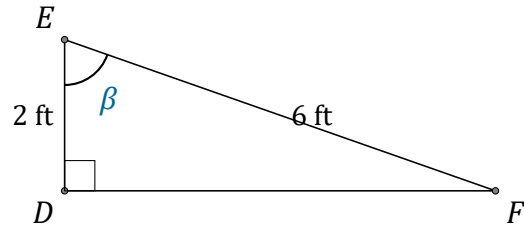
Name: \_\_\_\_\_

Date: \_\_\_\_\_

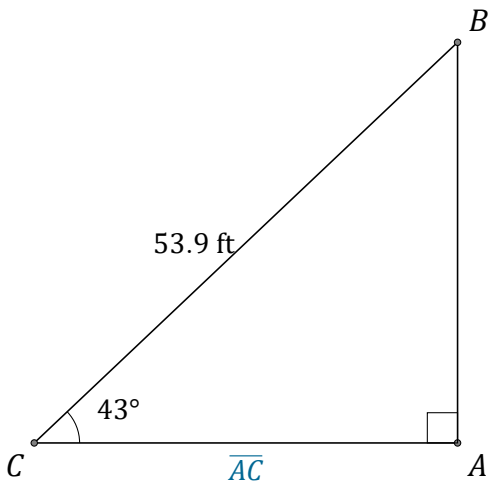
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



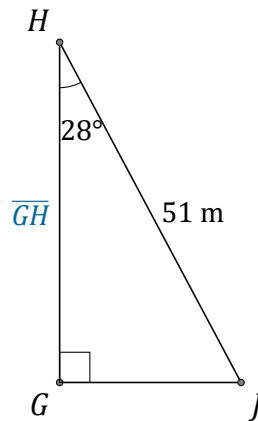
$\alpha = \angle XZY =$  \_\_\_\_\_



$\beta = \angle DEF =$  \_\_\_\_\_



$\overline{AC} =$  \_\_\_\_\_



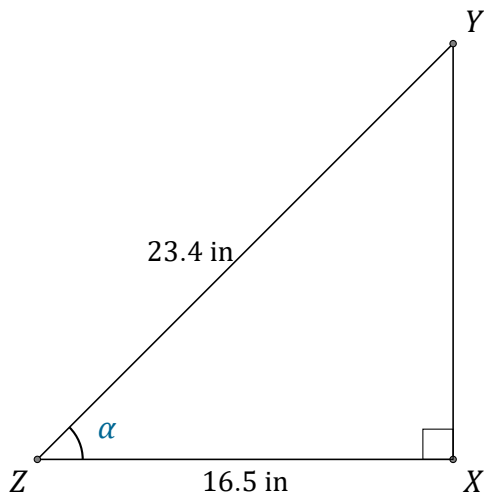
$\overline{GH} =$  \_\_\_\_\_

# Cosine Ratio (E) Answers

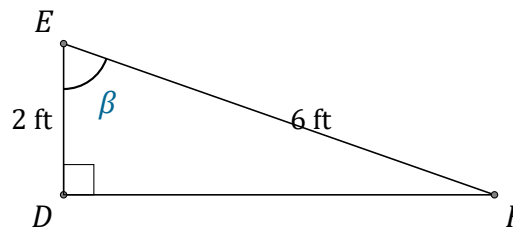
Name: \_\_\_\_\_

Date: \_\_\_\_\_

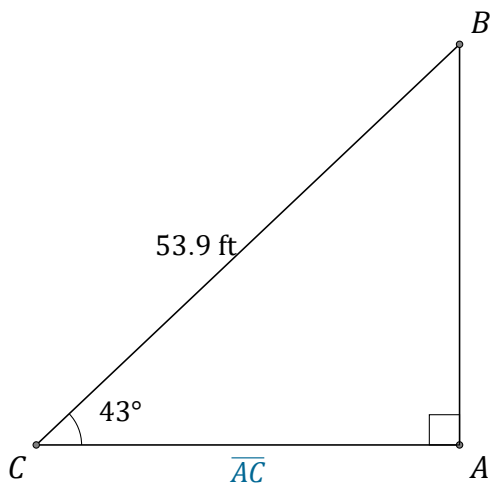
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



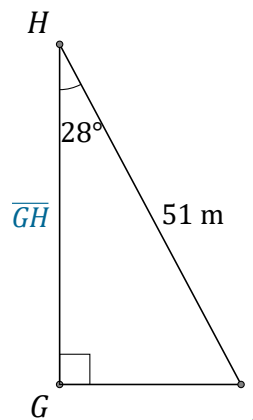
$$\alpha = \angle XZY = \underline{45.2^\circ}$$



$$\beta = \angle DEF = \underline{70.5^\circ}$$



$$\overline{AC} = \underline{39.4 \text{ ft}}$$



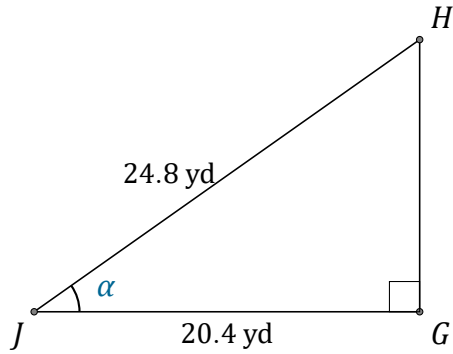
$$\overline{GH} = \underline{45 \text{ m}}$$

# Cosine Ratio (F)

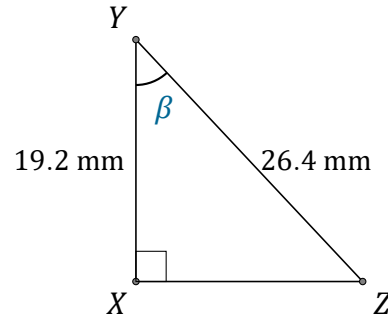
Name: \_\_\_\_\_

Date: \_\_\_\_\_

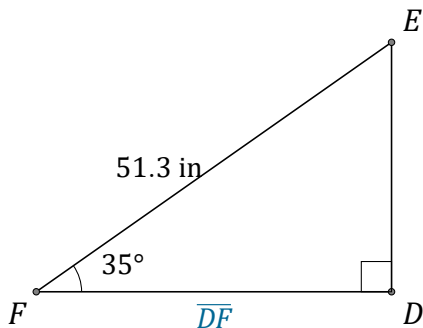
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



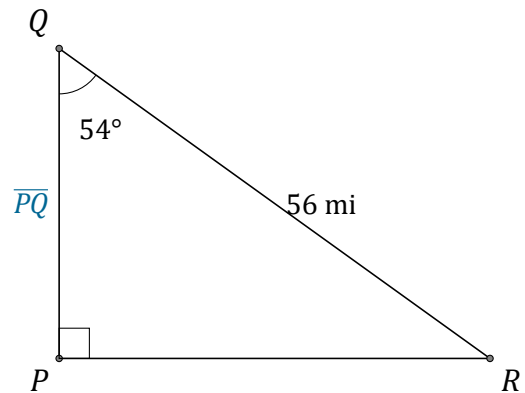
$\alpha = \angle GJH =$  \_\_\_\_\_



$\beta = \angle XYZ =$  \_\_\_\_\_



$\overline{DF} =$  \_\_\_\_\_



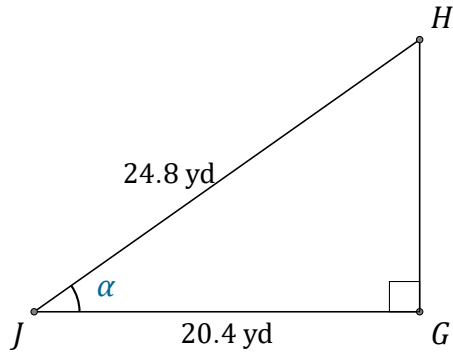
$\overline{PQ} =$  \_\_\_\_\_

# Cosine Ratio (F) Answers

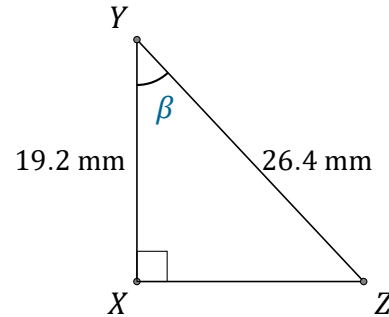
Name: \_\_\_\_\_

Date: \_\_\_\_\_

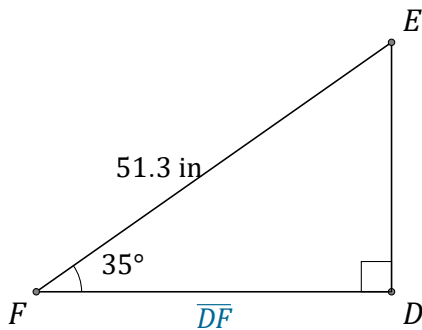
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



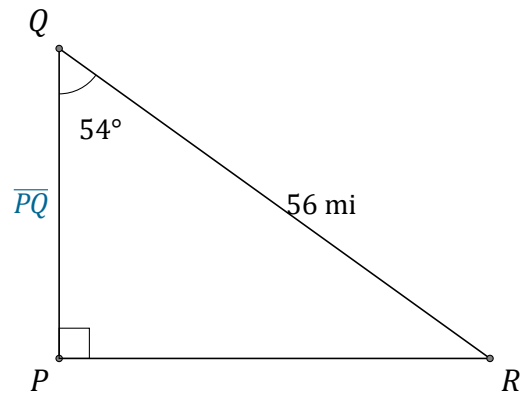
$$\alpha = \angle GJH = \underline{34.7^\circ}$$



$$\beta = \angle XYZ = \underline{43.3^\circ}$$



$$\overline{DF} = \underline{42 \text{ in}}$$



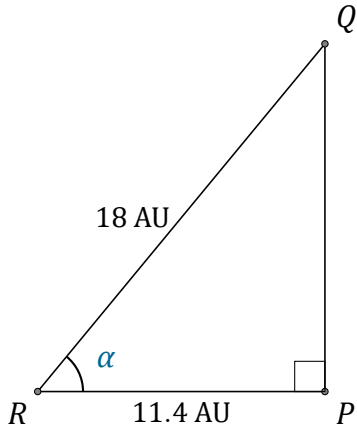
$$\overline{PQ} = \underline{32.9 \text{ mi}}$$

# Cosine Ratio (G)

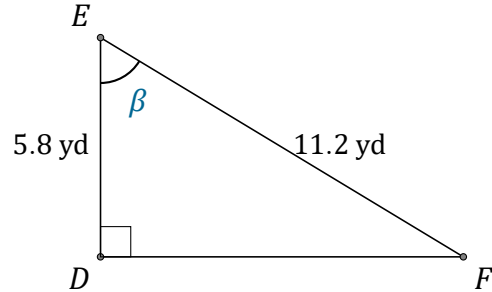
Name: \_\_\_\_\_

Date: \_\_\_\_\_

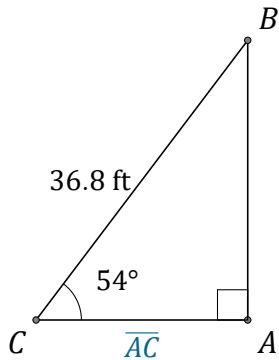
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



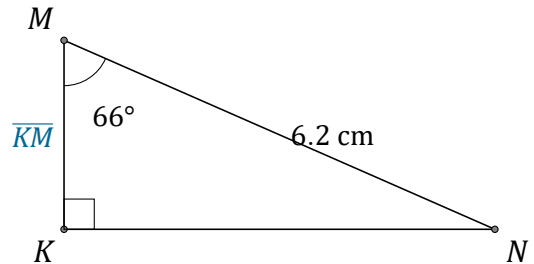
$\alpha = \angle PRQ =$  \_\_\_\_\_



$\beta = \angle DEF =$  \_\_\_\_\_



$\overline{AC} =$  \_\_\_\_\_



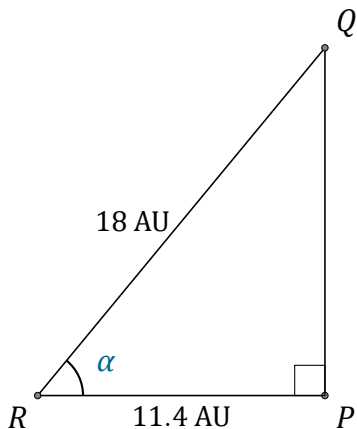
$\overline{KM} =$  \_\_\_\_\_

# Cosine Ratio (G) Answers

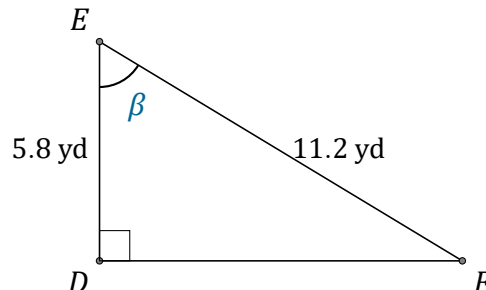
Name: \_\_\_\_\_

Date: \_\_\_\_\_

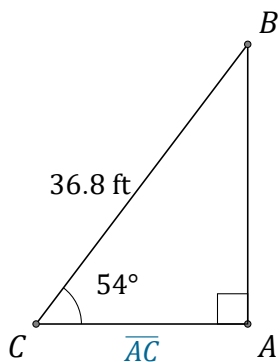
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



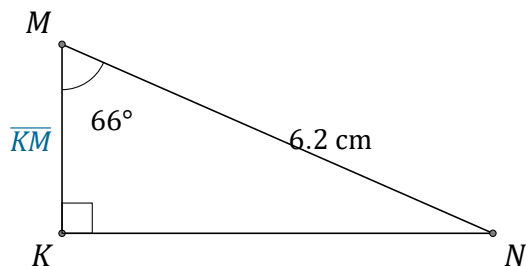
$\alpha = \angle PRQ = \underline{50.7^\circ}$



$\beta = \angle DEF = \underline{58.8^\circ}$



$\overline{AC} = \underline{21.6 \text{ ft}}$



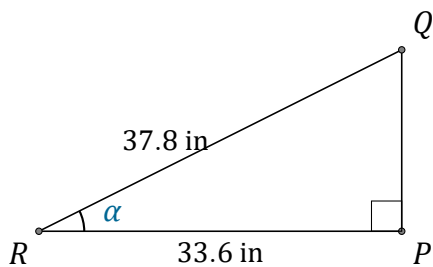
$\overline{KM} = \underline{2.5 \text{ cm}}$

# Cosine Ratio (H)

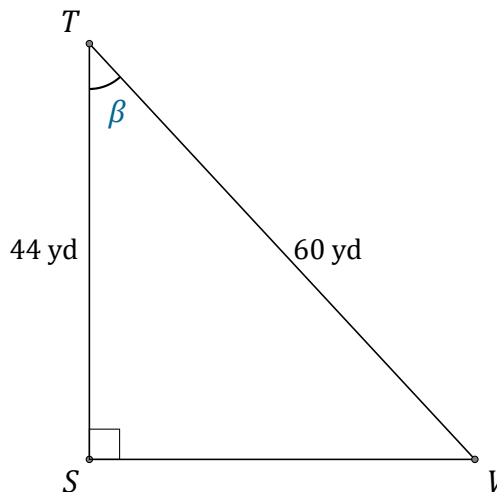
Name: \_\_\_\_\_

Date: \_\_\_\_\_

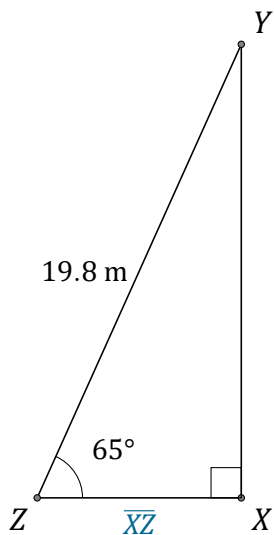
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



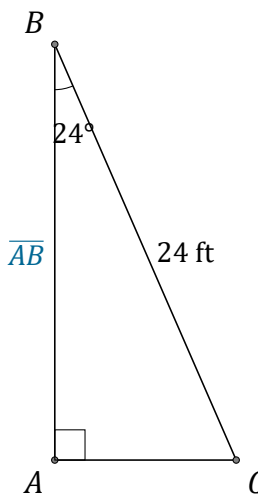
$\alpha = \angle PRQ =$  \_\_\_\_\_



$\beta = \angle STV =$  \_\_\_\_\_



$\overline{XZ} =$  \_\_\_\_\_



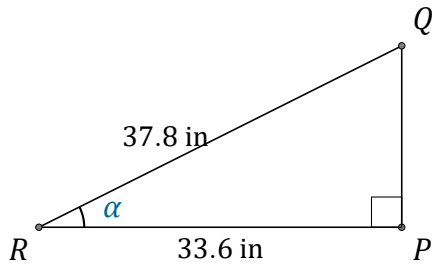
$\overline{AB} =$  \_\_\_\_\_

# Cosine Ratio (H) Answers

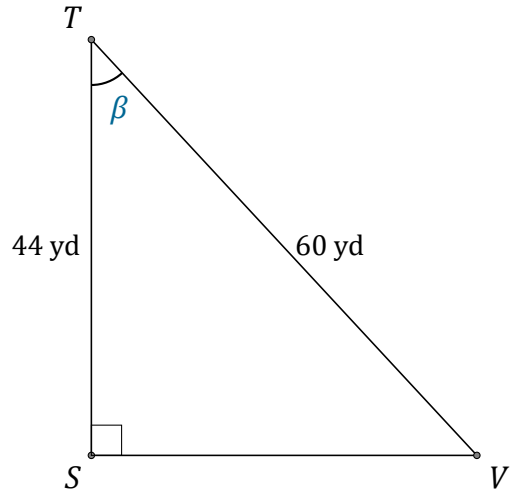
Name: \_\_\_\_\_

Date: \_\_\_\_\_

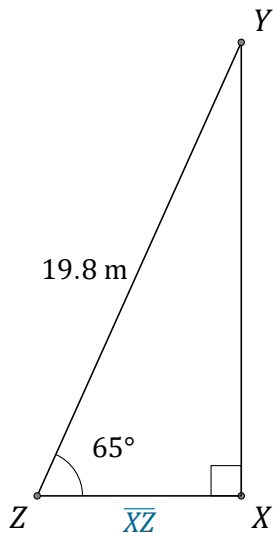
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



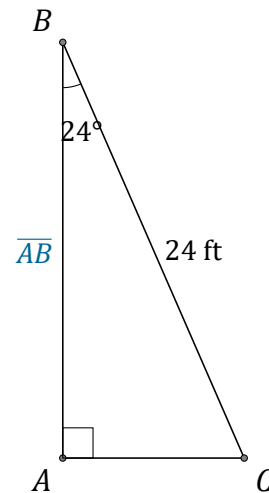
$$\alpha = \angle PRQ = \underline{27.3^\circ}$$



$$\beta = \angle STV = \underline{42.8^\circ}$$



$$\overline{XZ} = \underline{8.4 \text{ m}}$$



$$\overline{AB} = \underline{21.9 \text{ ft}}$$

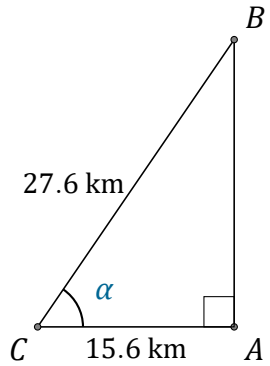


# Cosine Ratio (I)

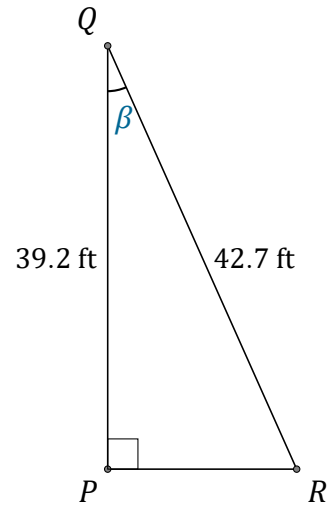
Name: \_\_\_\_\_

Date: \_\_\_\_\_

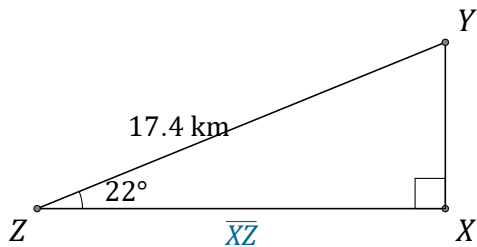
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



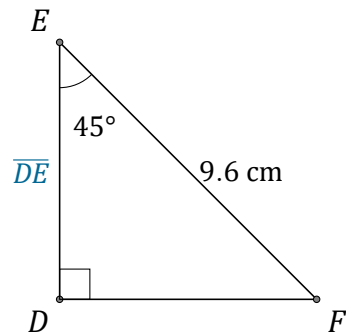
$\alpha = \angle ACB =$  \_\_\_\_\_



$\beta = \angle PQR =$  \_\_\_\_\_



$\overline{XZ} =$  \_\_\_\_\_



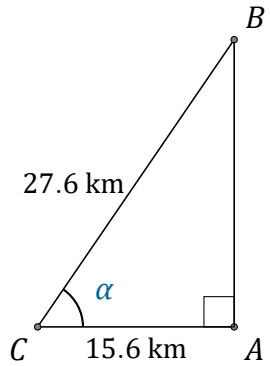
$\overline{DE} =$  \_\_\_\_\_

# Cosine Ratio (I) Answers

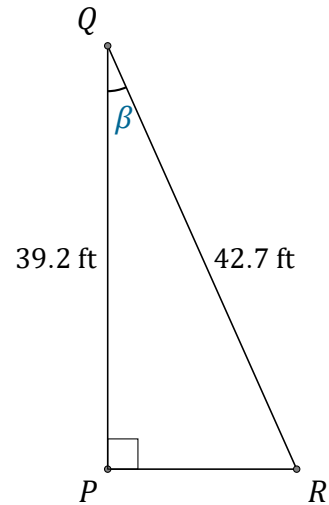
Name: \_\_\_\_\_

Date: \_\_\_\_\_

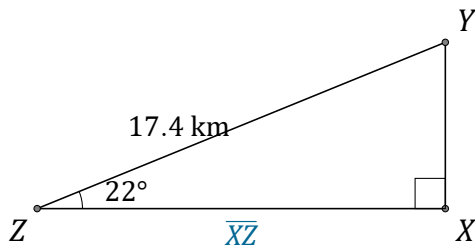
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



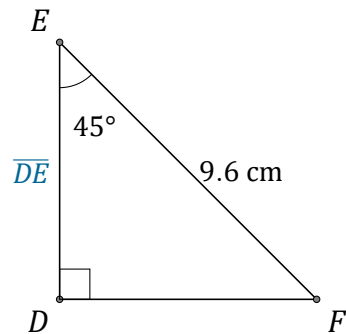
$$\alpha = \angle ACB = \underline{55.6^\circ}$$



$$\beta = \angle PQR = \underline{23.4^\circ}$$



$$\overline{XZ} = \underline{16.1 \text{ km}}$$



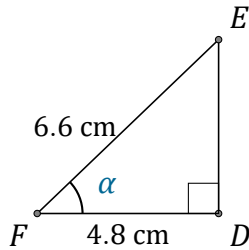
$$\overline{DE} = \underline{6.8 \text{ cm}}$$

# Cosine Ratio (J)

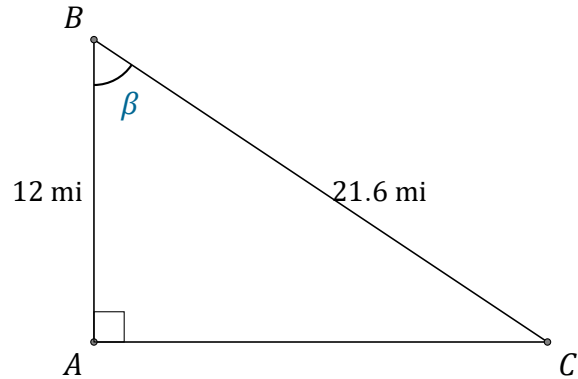
Name: \_\_\_\_\_

Date: \_\_\_\_\_

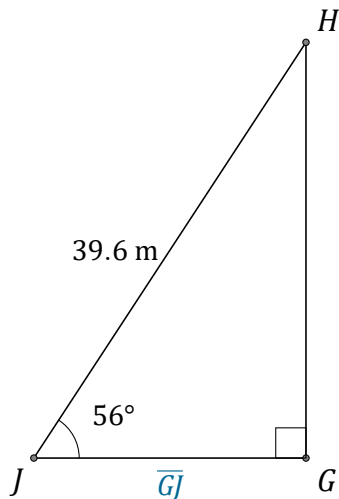
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



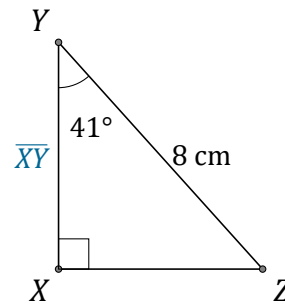
$\alpha = \angle DFE =$  \_\_\_\_\_



$\beta = \angle ABC =$  \_\_\_\_\_



$\overline{GJ} =$  \_\_\_\_\_



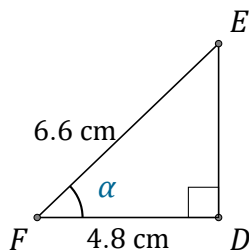
$\overline{XY} =$  \_\_\_\_\_

# Cosine Ratio (J) Answers

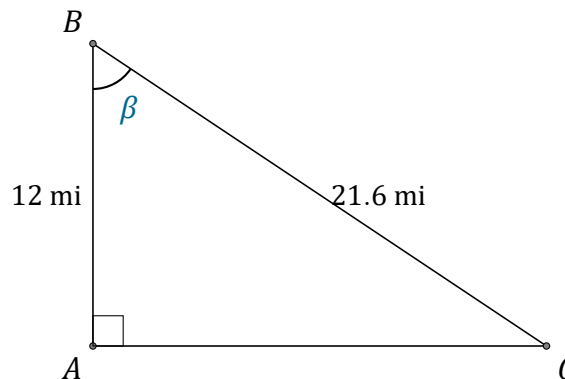
Name: \_\_\_\_\_

Date: \_\_\_\_\_

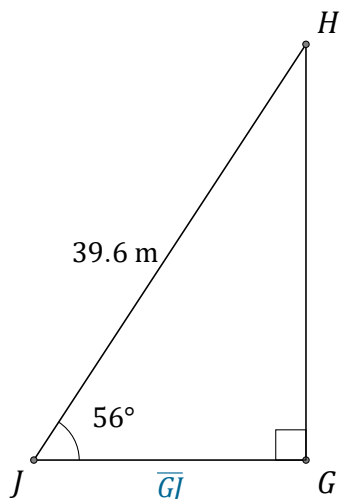
Calculate the angle and side values using the cosine ratio:  $\cos(\alpha) = \frac{A}{H}$



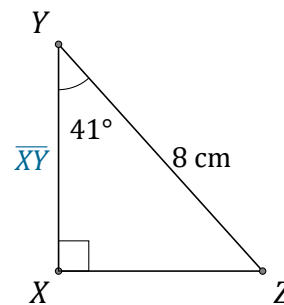
$$\alpha = \angle DFE = \underline{43.3^\circ}$$



$$\beta = \angle ABC = \underline{56.3^\circ}$$



$$\overline{GJ} = \underline{22.1 \text{ m}}$$



$$\overline{XY} = \underline{6 \text{ cm}}$$