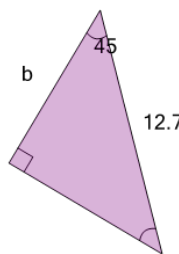




Math worksheet on 'Trigonometry - Side Length Ratios in Decimal from Diagrams (Level 1)'. Part of a broader unit on 'Trigonometry - Solving Triangles'

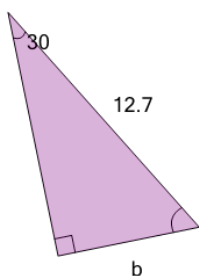
Learn online: [app.mobius.academy/math/units/trigonometry\\_solving\\_triangles/](http://app.mobius.academy/math/units/trigonometry_solving_triangles/)

**1** Solve for the side length in decimal form by calculating the trigonometric ratio



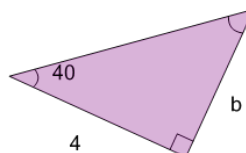
- |                                     |                                     |
|-------------------------------------|-------------------------------------|
| <b>a</b><br>$b = \frac{0.71}{9}$    | <b>b</b><br>$b = \frac{0.71}{12.7}$ |
| <b>c</b><br>$b = \frac{12.7}{0.71}$ | <b>d</b><br>$b = \frac{9}{0.71}$    |
| <b>e</b><br>$b = 0.71 \times 9$     | <b>f</b><br>$b = 0.71 \times 12.7$  |

**2** Solve for the side length in decimal form by calculating the trigonometric ratio



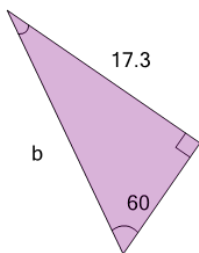
- |                                    |                                     |
|------------------------------------|-------------------------------------|
| <b>a</b><br>$b = \frac{0.50}{11}$  | <b>b</b><br>$b = 0.50 \times 6.4$   |
| <b>c</b><br>$b = 0.50 \times 12.7$ | <b>d</b><br>$b = \frac{11}{0.50}$   |
| <b>e</b><br>$b = \frac{0.50}{6.4}$ | <b>f</b><br>$b = \frac{0.50}{12.7}$ |

**3** Solve for the side length in decimal form by calculating the trigonometric ratio



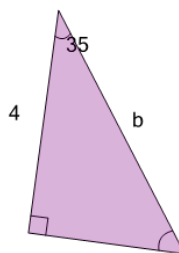
- |                                    |                                    |
|------------------------------------|------------------------------------|
| <b>a</b><br>$b = \frac{0.84}{5.2}$ | <b>b</b><br>$b = \frac{0.84}{4}$   |
| <b>c</b><br>$b = 0.84 \times 4$    | <b>d</b><br>$b = 0.84 \times 5.2$  |
| <b>e</b><br>$b = \frac{0.84}{3.4}$ | <b>f</b><br>$b = \frac{5.2}{0.84}$ |

**4** Solve for the side length in decimal form by calculating the trigonometric ratio



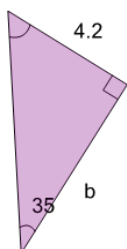
- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| <b>a</b><br>$b = \frac{10}{0.87}$ | <b>b</b><br>$b = \frac{0.87}{10}$   |
| <b>c</b><br>$b = 0.87 \times 10$  | <b>d</b><br>$b = \frac{0.87}{17.3}$ |
| <b>e</b><br>$b = \frac{0.87}{20}$ | <b>f</b><br>$b = \frac{17.3}{0.87}$ |

**5** Solve for the side length in decimal form by calculating the trigonometric ratio



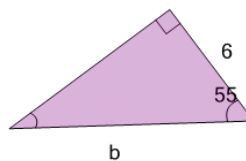
- |                                    |                                    |
|------------------------------------|------------------------------------|
| <b>a</b><br>$b = \frac{2.8}{0.82}$ | <b>b</b><br>$b = \frac{0.82}{4}$   |
| <b>c</b><br>$b = \frac{0.82}{2.8}$ | <b>d</b><br>$b = \frac{0.82}{4.9}$ |
| <b>e</b><br>$b = \frac{4}{0.82}$   | <b>f</b><br>$b = 0.82 \times 4.9$  |

**6** Solve for the side length in decimal form by calculating the trigonometric ratio



- |                                    |                                    |
|------------------------------------|------------------------------------|
| <b>a</b><br>$b = \frac{0.70}{7.3}$ | <b>b</b><br>$b = \frac{0.70}{6}$   |
| <b>c</b><br>$b = \frac{7.3}{0.70}$ | <b>d</b><br>$b = \frac{4.2}{0.70}$ |
| <b>e</b><br>$b = 0.70 \times 6$    | <b>f</b><br>$b = 0.70 \times 4.2$  |

**7** Solve for the side length in decimal form by calculating the trigonometric ratio



- |                                    |                                     |
|------------------------------------|-------------------------------------|
| <b>a</b><br>$b = \frac{8.6}{0.57}$ | <b>b</b><br>$b = \frac{0.57}{10.5}$ |
| <b>c</b><br>$b = \frac{0.57}{6}$   | <b>d</b><br>$b = \frac{0.57}{8.6}$  |
| <b>e</b><br>$b = 0.57 \times 8.6$  | <b>f</b><br>$b = \frac{6}{0.57}$    |