# TRIGONOMETRY ASSIGNMENT
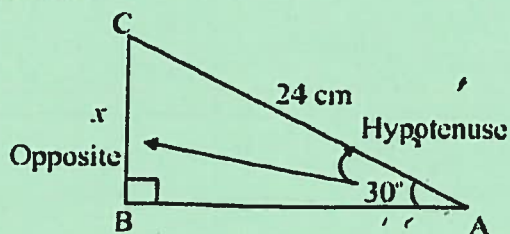
1. Decide whether to use sine, cosine, tangent, or the Pythagorean relationship to find $x$. Solve for $x$.
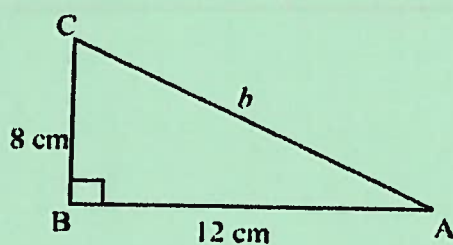
   C

   24 cm

   $x$

   Opposite

   Hypotenuse

   30°

   B          A

   $x = 12$

2. Decide whether to use sine, cosine, tangent, or the Pythagorean relationship to find $\angle C$. Solve for $\angle C$.
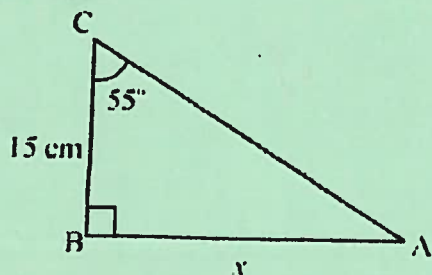
   C

   hyp

   13 cm   hyp

   cm

   B          A

   adj  144
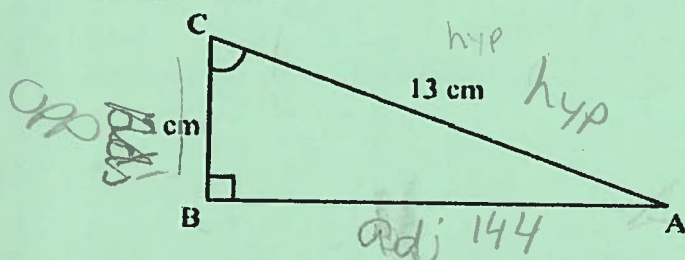
   $\angle C = 67.3$

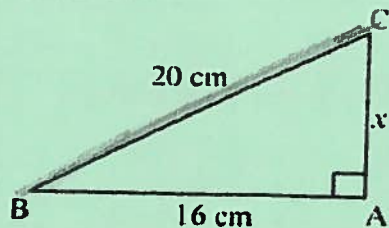3. Decide whether to use sine, cosine, tangent, or the Pythagorean relationship to find $b$. Solve for $b$.

   C

   $b$

   8 cm

   B   12 cm   A

   $C = 14.4$

4. Decide whether to use sine, cosine, tangent, or the Pythagorean relationship to find $x$. Solve for $x$.
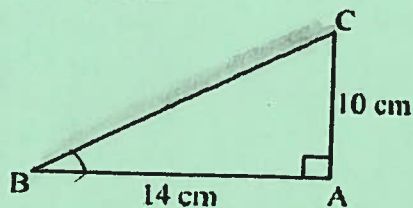
   C

   55°

   15 cm

   B          A

   $x$

   $x = 21.4$

5. Decide whether to use sine, cosine, tangent, or the Pythagorean relationship to find $x$. Solve for $x$.
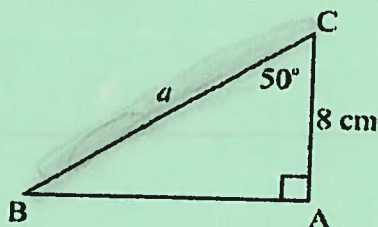
20 cm

$x$

B   16 cm   A

C

$b = 12$

6. Decide whether to use sine, cosine, tangent, or the Pythagorean relationship to find $\angle B$. Solve for $\angle B$.

C

10 cm

B   14 cm   A

$\angle B = 35.5$ 46
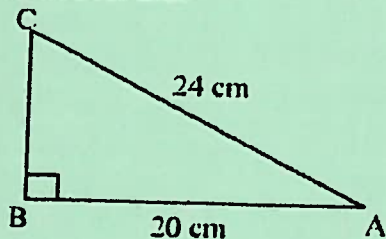
$\sqrt{296}$

$= 17.2$

7. Decide whether to use sine, cosine, tangent, or the Pythagorean relationship to find $a$. Solve for $a$.

C

$a$   50°

8 cm

B   A

$C = 12.4$

8. Decide whether to use sine, cosine, tangent, or Pythagorean relationship to find $\angle C$. Solve for $\angle C$.

C

24 cm

B   20 cm   A

$\angle C = 56.4$