Ma10 10 A&W   5.4 - Using Trig. Ratios to find Lengths of Unknown Sides
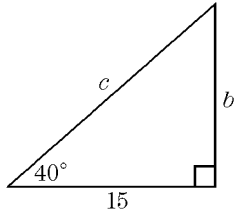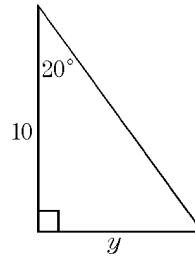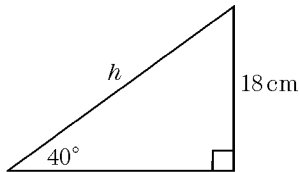
Mr. Singh

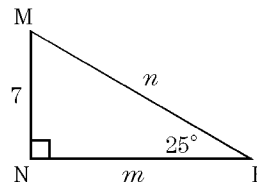1.   Find the value of c to the nearest unit.

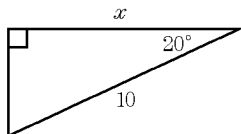5.   Find the value of y to the nearest tenth.

2.   Find the value of h to the nearest centimetre.
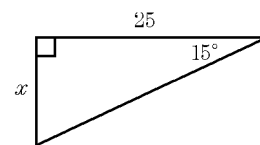

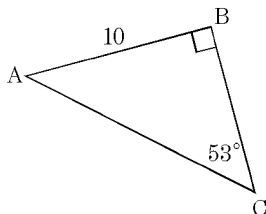6.   What is the length of side $\overline{NP}$ to one decimal place?

3.   Find the value of x to the nearest tenth.
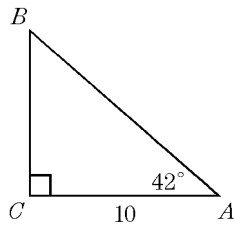

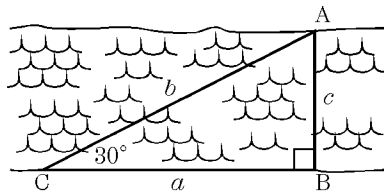7.   Find x to the nearest tenth.

4.   Find the length of $\overline{AC}$ to the nearest tenth.
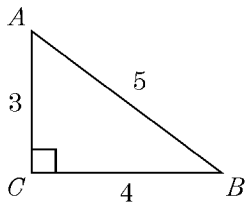
8. What is the length of side $\overline{BC}$ to one decimal place?

B
C —42°— 10 — A
(right angle at C)

9. In $\triangle ABC$, Jacob finds that the measure of side $a = 25\,\text{m}$. What is the shortest distance across the river?
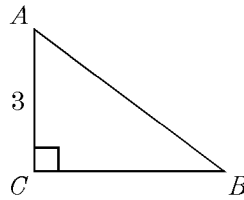
A
b
c
30°
C — a — B

10. $\sin \angle \underline{\hspace{2em}} = \frac{4}{5}$

A
3
5
C — 4 — B

11. $\cos \angle \underline{\hspace{2em}} = \frac{3}{5}$

12. $\tan \angle \underline{\hspace{2em}} = \frac{4}{3}$
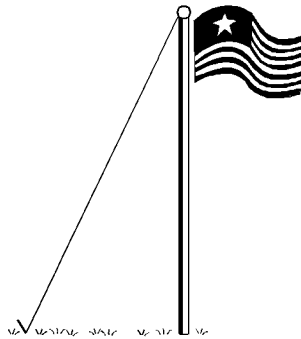
13. If $\sin \angle B = \frac{3}{4}$, find AB.

A
3
C
B

14. If $\cos \angle A = \frac{1}{3}$, find BC.

15. A wire is attached to the top of a 7.5 meter tall flagpole and forms a $60°$ angle with the ground. Exactly how long is the wire? Express your answer in simplest radical form.

1.
Answer: 20

2.
Answer: 28 cm

3.
Answer: 9.4

4.
Answer: 12.5

5.
Answer: 3.6

6.
Answer: 15.0

7.
Answer: 6.7

8.
Answer: 9.0

9.
Answer: 14.4 m

10.
Answer: A

11.
Answer: A

12.
Answer: A

13.
Answer: 4

14.
Answer: $6\sqrt{2}$

15.
Answer: $5\sqrt{3}\,\mathrm{m}$