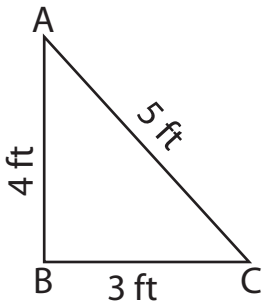
Name : _____

Identify the right triangles

Sheet 1

Apply the Pythagorean theorem. Find whether each triangle has a right angle.

1)



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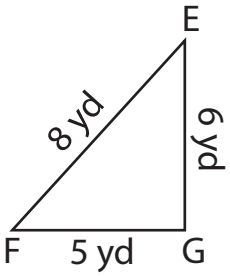
2)



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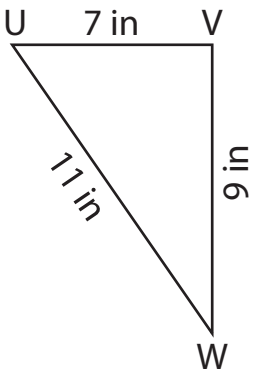
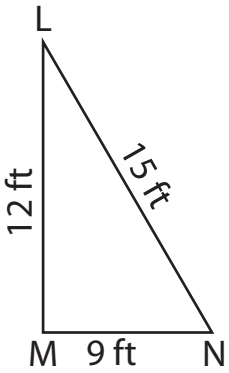
3)



_____

4)



_____

5) In triangle XYZ, the sides XY, YZ and XZ measure 12 ft, 16 ft and 20 ft respectively. Prove that XYZ is a right triangle.

_____

6) In triangle PQR, the sides PQ, QR and PR measure 15 in, 20 in and 25 in respectively. Prove that PQR is a right triangle.

_____

Name : _____

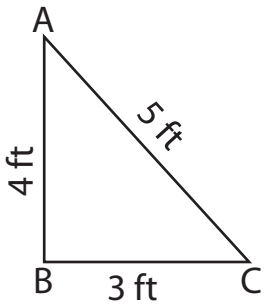
Answer Key

Identify the right triangles

Sheet 1

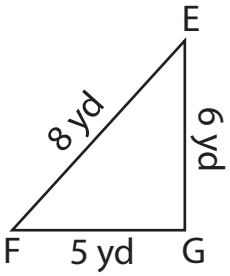
Apply the Pythagorean theorem. Find whether each triangle has a right angle.

1)



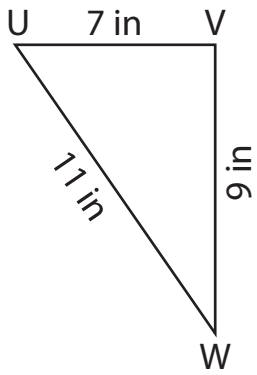
right triangle

2)



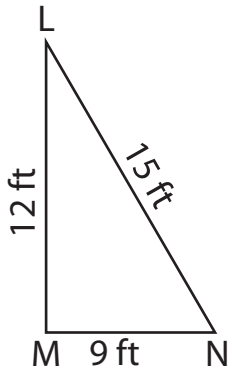
not a right triangle

3)



not a right triangle

4)



right triangle

5) In triangle XYZ, the sides XY, YZ and XZ measure 12 ft, 16 ft and 20 ft respectively. Prove that XYZ is a right triangle.

$XY^2 = 144$ ft, $YZ^2 = 256$ ft, $XZ^2 = 400$ ft

$XY^2 + YZ^2 = XZ^2$

XYZ is a right triangle.

6) In triangle PQR, the sides PQ, QR and PR measure 15 in, 20 in and 25 in respectively. Prove that PQR is a right triangle.

$PQ^2 = 225$ in, $QR^2 = 400$ in, $PR^2 = 625$ in

$PQ^2 + QR^2 = PR^2$

PQR is a right triangle.