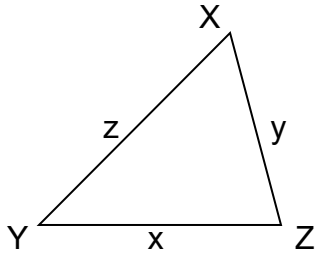


UNIT 5 – RIGHT ANGLE TRIANGLES - ANSWERS

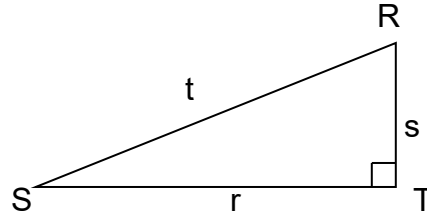
ASSIGNMENT 1 – LABELLING TRIANGLES

1)

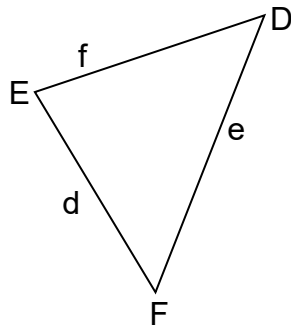
a)



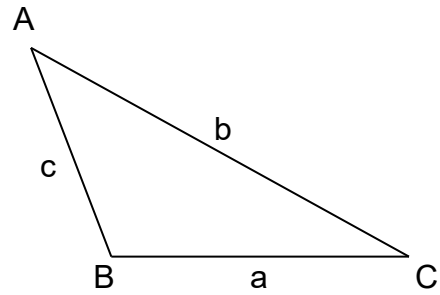
b)



c)

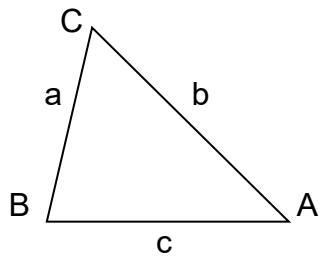


d)

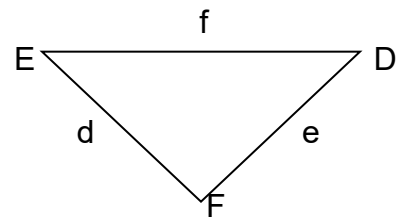


2)

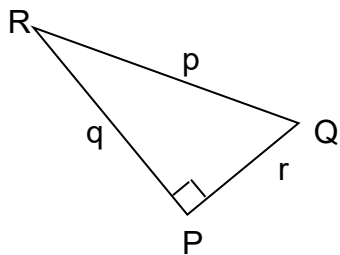
a)



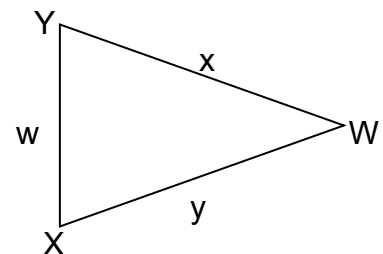
b)



c)



d)



ASSIGNMENT 2 – PYTHAGOREAN THEOREM

- 1) a) $y^2 = z^2 + x^2$
b) $e^2 = d^2 + f^2$
- 2) a) $p = 10.82$ b) $m = 8.06$
- c) $y = 6.24$ d) $z = 8.66$
- 3) a) 10 b) 17.5
- c) 16 d) 30

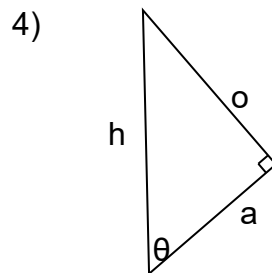
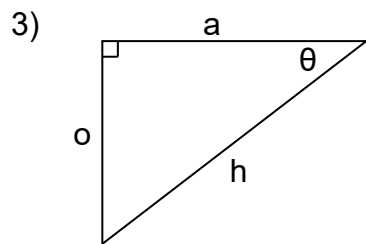
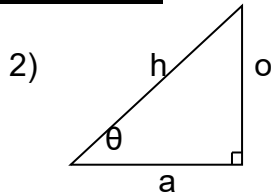
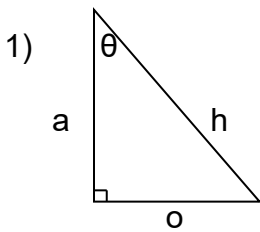
ASSIGNMENT 3 – USING PYTHAGOREAN THEOREM IN PROBLEM SOLVING

- 1) 21.4 cm
- 2) 5.5 m
- 3) 11.1 m
- 4) 10
- 5) $l^2 = d^2 + h^2$
- 6) 12.5 feet
- 7) 19.2 m
- 8) 46.4 in

ASSIGNMENT 4 – PYTHAGOREAN TRIPLES

- 1) a) yes - $5^2 = 4^2 + 3^2$
- b) no - $23^2 \neq 21^2 + 9^2$
- c) yes - $25^2 = 24^2 + 7^2$
- d) yes - $17^2 = 15^2 + 8^2$

ASSIGNMENT 5 – TRIGONOMETRY



ASSIGNMENT 6 – THE TRIGONOMETRIC RATIOS

- 1a) $\sin \theta = 0.6232$ b) $\sin \theta = 0.5417$
2a) 0.1736 b) 0.7431 c) 0.9744 d) 0.9962
3a) $\cos \theta = 0.6371$ b) $\cos \theta = 0.8438$
4a) 0.9848 b) 0.6691 c) 0.2250 d) 0.0872
5a) $\tan \theta = 0.7846$ b) $\tan \theta = 0.6420$
6a) 0.1763 b) 1.1106 c) 4.3315 d) 11.4301
7a) 0 b) 1
8a) 1 b) 0
9a) 0 b) 1 c) 57.2900 d) undefined ("Error" is **not** correct)

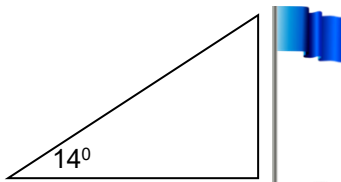
ASSIGNMENT 7 – FINDING SIDES IN RIGHT TRIANGLES

- 1a) 13.3 m b) 5.1 cm c) 7.8 cm
d) 12.5 m e) 5.5 m f) 7.2 cm

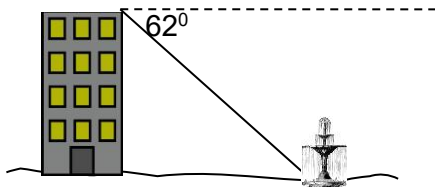
ASSIGNMENT 8 – USING ANGLE OF ELEVATION AND DEPRESSION

- 1a) 25°
2a) 27.1ft b) 5.2 m
3) Name: CAD or DAC Measure: 27°
4a) 5.6 cm b) 25.2in

5)



6)



- 7) 216.4 m
8) 4.0 m
9) 9.2 m
10) 26.6 m
11) 5.4 m
12) 24.0 m
13) 5.5 ft

ASSIGNMENT 9 – FINDING ANGLES

- 1) a) 33° b) 26°
- c) 67° d) 89°
- e) 72° f) 25°
- 2) 9°
- 3) 51°
- 4) 31°
- 5) 61°
- 6) 54°