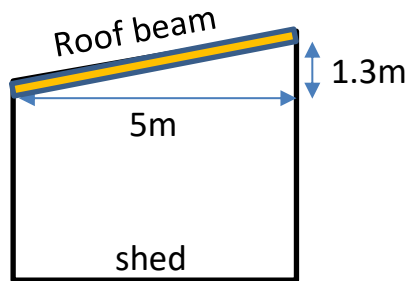


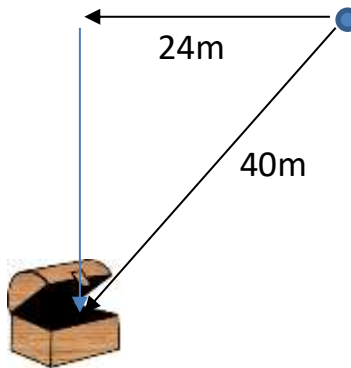


PYTHAGORAS' THEOREM WORD PROBLEMS 2

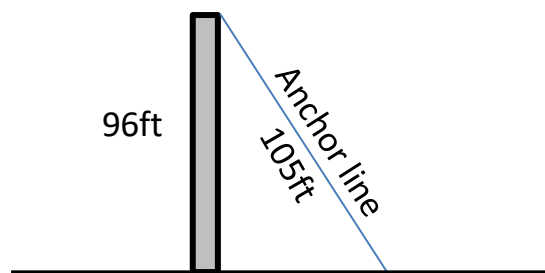
- 1) A shed with a pent roof need to have some new roof beams fitted. The width of the shed is 5m and the height of the pent roof is 1.3m. Work out the length of the roof beams needed to 1dp.



- 2) Captain is on a geo-cache hunt. His gps tells him that he is 40m away from the treasure. He walks 24m due west. The gps compass now tells him that the treasure is due south from where he is standing. How far south does he need to go to find it?



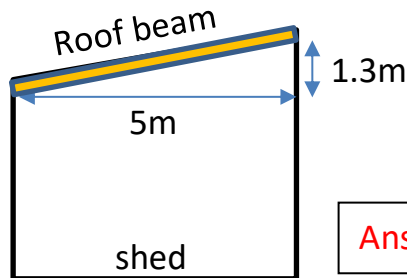
- 3) An anchor line for a tower needs to be replaced. The tower is 96ft tall. The anchor line is 105ft long. How far from the tower can it be placed, to the nearest foot?





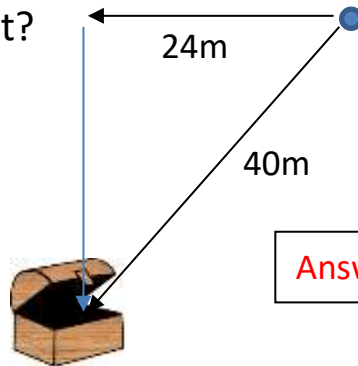
PYTHAGORAS' THEOREM WORD PROBLEMS 2 ANSWERS

- 1) A shed with a pent roof need to have some new roof beams fitted. The width of the shed is 5m and the height of the pent roof is 1.3m. Work out the length of the roof beams needed to 1dp.



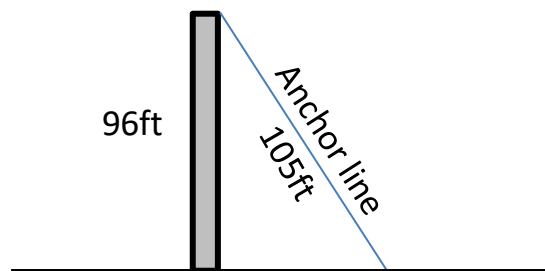
$$\text{Answer: } \sqrt{5^2 + 1.3^2} = 5.2\text{m}$$

- 2) Captain is on a geo-cache hunt. His gps tells him that he is 40m away from the treasure. He walks 24m due west. The gps compass now tells him that the treasure is due south from where he is standing. How far south does he need to go to find it?



$$\text{Answer: } \sqrt{40^2 - 24^2} = 32\text{m}$$

- 3) An anchor line for a tower needs to be replaced. The tower is 96ft tall. The anchor line is 105ft long. How far from the tower can it be placed, to 1dp?



$$\text{Answer: } \sqrt{105^2 - 96^2} = 42.5\text{ft}$$

