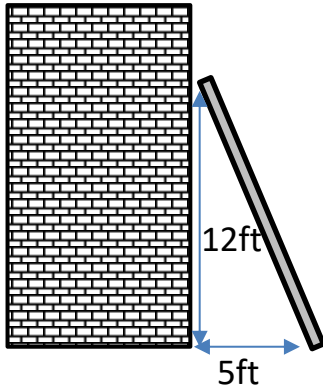


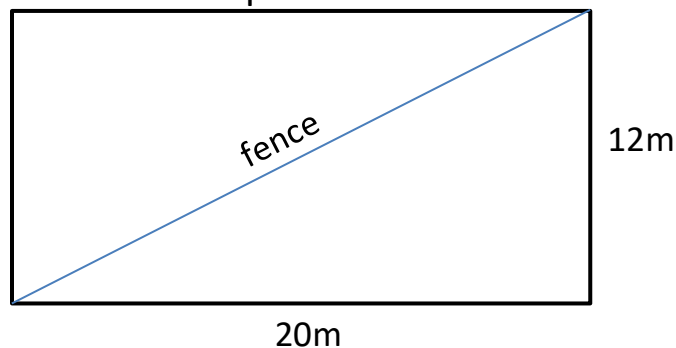


## PYTHAGORAS' THEOREM WORD PROBLEMS 1

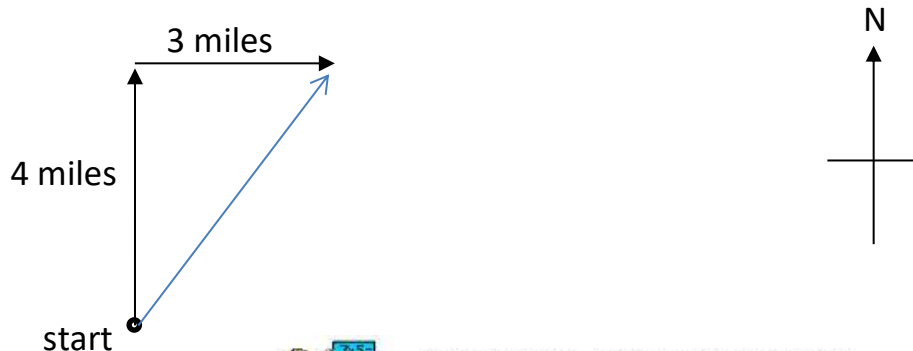
- 1) A ladder is placed 5ft away from a house. The ladder comes up to 12ft on the side of the house. How long is the ladder?



- 2) Tyger has a rectangular garden measuring 12m by 20m that he wants to split diagonally from corner to corner using a fence. How long does his fence need to be? Give your answer to 1dp.



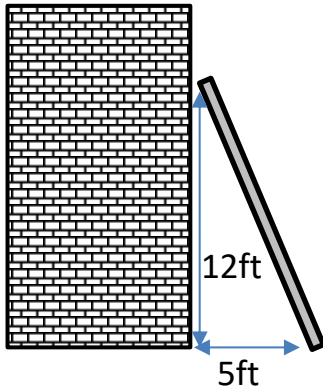
- 3) Sally walks 4 miles due north and then 3 miles due east. How far has she walked as the crow flies from her starting point?





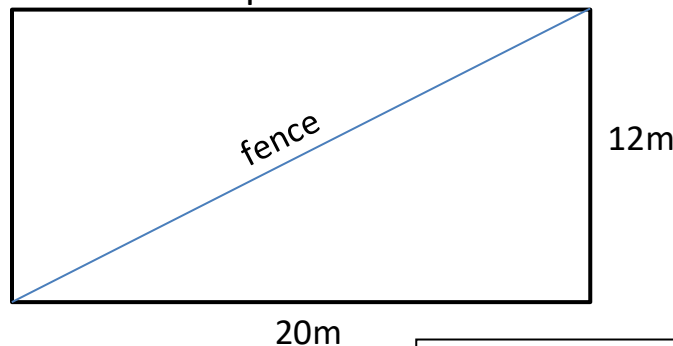
## PYTHAGORAS' THEOREM WORD PROBLEMS 1 ANSWERS

- 1) A ladder is placed 5ft away from a house. The ladder comes up to 12ft on the side of the house. How long is the ladder?



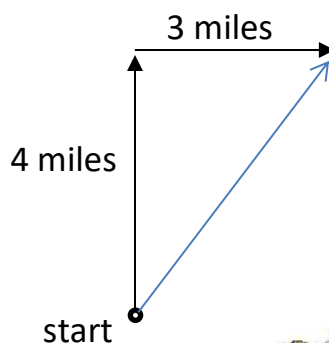
$$\text{Answer} = \sqrt{(5^2 + 12^2)} = \sqrt{169} = 13\text{ft}$$

- 2) Tyger has a rectangular garden measuring 12m by 20m that he wants to split diagonally from corner to corner using a fence. How long does his fence need to be? Give your answer to 1dp.



$$\text{Answer} = \sqrt{(20^2 + 12^2)} = \sqrt{544} = 23.3\text{m}$$

- 3) Sally walks 4 miles due north and then 3 miles due east. How far has she walked as the crow flies from her starting point?



$$\text{Answer} = \sqrt{(4^2 + 3^2)} = \sqrt{25} = 5 \text{ miles}$$

