



Estimating

Short task

Jim and Paul are working in a carpentry workshop. Today they are preparing the doors for a house that is having new doors fitted.

1

- a There are two hinges for each door. Each hinge needs six screws. How many screws will they need for the hinges for each door?



Space for working:

- b There are two handles for each door. Each handle needs four screws. How many screws will they need for the handles for each door?

Space for working:

- c They need some extra screws for each door. So in total each door needs 22 screws. Estimate how many screws they will need for nine doors.

Show here how you estimated this:

2

- a Jim and Paul are using screws that come in packs of 20. Estimate how many packs of screws they will need for all nine doors.

- b Each pack of screws costs 93p. **Roughly** how much it will cost to buy 50 packs of screws?

- 3 Handles cost £6.95 for a pack of two. Estimate how much it will cost to buy the handles for all nine doors (nine packs).

Show how you did this:

- 4 It takes about 27 minutes to fit the handles and hinges to the first door.

- a Approximately how many minutes will it take to fit the handles and hinges to all nine doors?

- b Roughly how long is this (to the nearest hour)? (There are 60 minutes in an hour.)

Mini-test

- 1 Sandwiches cost £2.05 each. Sue is buying six for her office mates. Which of these is the best estimate the cost of the six sandwiches?
 - a £12
 - b £3
 - c £20
 - d £4

- 2 Andy is going on a 385-mile journey. If he travels 62 miles every hour, **roughly** how many hours will the journey take?
 - a 3 hours
 - b 6 hours
 - c 21 hours
 - d 12 hours

- 3 Pauline buys items which cost £41.95 and £16.99. Which is the **best** estimate to the total cost of the two items?
 - a £58
 - b £57
 - c £60
 - d £59

- 4 What is 47.4 km/hr to the nearest 10 km/hr?
 - a 40 km/hr
 - b 50 km/hr
 - c 45 km/hr
 - d 47 km/hr

- 5 Petrol costs 93.4 pence per litre. I put 38 litres in my tank and estimate how much it will cost. Which of these estimates will be closest?
 - a £38
 - b £36
 - c £30
 - d £40

- 6 My friends and I are doing a sponsored swim. We are aiming to swim 1,600 metres between us. How many 20 metres lengths of the pool will this be altogether?
 - a 80 lengths
 - b 800 lengths
 - c 8 lengths
 - d 40 lengths