

Ratio: Inverse proportion

1) A farmer estimates that 45 fruit pickers can pick all the strawberries in a field in 28 days.

(a) How long would it take with 21 pickers?

(b) How many workers would be needed to clear the field in 10 days?

2) One sack of chicken food is enough to feed 500 chickens for 12 days.

(a) How long would it last if there are 240 chickens?

(b) If a sack lasts 40 days, how many chickens are there?

3) A building contractor estimates that it will take 18 days to build a wall round a park, with 20 people working on it.

(a) How long will it take if there are 45 men working on it?

(b) How many workers are needed to complete the wall in 4 days?

4) It takes a 16-speed CD-Rom drive 105 seconds to transfer a certain file.

(a) How long would it take with a 12-speed CD-Rom drive?

(b) What speed drive would be needed to transfer the file in 1 minute?

5) In a certain circuit, a wire with a resistance of 120 ohms allows a current of 21 milliamps.

(a) What would the current be if the resistance were 70 ohms?

(b) What should the resistance be if the required current is 40 milliamps?

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