

Word problems

Name _____

Date _____

Read each problem, set out the calculation or equation and write a complete answer.

1. A digital image is 2,400 pixels wide and 1,800 pixels high. Its width and height are each reduced by 20%, and then both new dimensions are reduced by a further 20%. How many pixels does the final image contain?

2. In a rainwater collection model, rain forms a uniform layer 12 mm deep over a horizontal area of 72 m². The system collects 85% of this water. How many litres does it collect?

3. A traveller exchanges £250. Desk A deducts a £4 fee before converting the remaining pounds at €1.15 per pound. Desk B charges no fee and converts all £250 at €1.12 per pound. How many more euros would the traveller receive at desk A than at desk B?

4. A parcel may weigh at most 20 kg. Each empty crate weighs 1.2 kg and is filled with ten bottles weighing 0.75 kg each. Considering only this weight limit, what is the greatest number of complete, filled crates that can go in one parcel?

5. A hall has 10 rows of seats, with 14 seats in the first row and 2 more in each subsequent row. For a performance, 20% of all the seats are kept unavailable. How many seats are available?
