

NUMBER 5

MARK

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1. Find, and circle, from the list below, the **two** calculations that would give the same answer as: 8×12

- A $4 \times 4 \times 12$ B $4 \times 2 \times 4 \times 3$
C $4 \times 2 \times 6 \times 2$ D $4 \times 2 \times 6 \times 6$

2. Find, and circle, from the list below, the **four** calculations that would give the same answer as: 12×50

- A $12 \times 5 \times 10$ B $6 \times 2 \times 50$
C $12 \times 30 \times 20$ D $4 \times 3 \times 50$
E $6 \times 6 \times 50$ F $4 \times 3 \times 2 \times 25$

3. Find, and circle, from the list below, **all** the calculations that would give the same answer as: 16×25

- A 8×50 B $4 \times 4 \times 5 \times 5$
C $8 \times 2 \times 25$ D $2 \times 8 \times 5 \times 5$
E $4 \times 2 \times 50$ F 4×100

4. List four calculations that would give the same answer as:

$$24 \times 36$$

5. Amelia's calculator has the **6** button broken. She wanted to solve the following problem:

$$16 \times 64$$

Amelia solved this problem by pressing the following buttons on her calculator:

$$2 \times 8 \times 8 \times 8 =$$

Show how Amelia could solve the following problems on her calculator.

(a) 6×24

(b) 36×16

(c) 6×56

(d) 66×106

6. Some problems can be changed into easier forms so they can be solved using mental arithmetic.

$$\begin{aligned} \text{Example: } & 18 \times 50 \\ & = 9 \times 2 \times 50 \\ & = 9 \times 100 \\ & = 900 \end{aligned}$$

Show how the following problems could be made easier and solved.

(a) 16×50

(b) 14×25

7. Solve the following problems.

(a) 30×10

(b) 20×100

(c) 500×20

(d) 60×40

(e) $600 \div 3$

(f) $800 \div 40$

(g) $1000 \div 50$

(h) $3600 \div 30$

8. (a) What would be the total cost of 20 CD's, if each CD cost \$30?

(b) How many 50 gram Easter eggs would be in a 300 gram box?



9. Round the following numbers to the nearest 10.

(a) 18

(b) 29

(c) 61

(d) 8

(e) 118

(f) 243

10. Find the approximate answer to each of the following problems by rounding to the nearest 10 first.

Example: 18×33
 $= 20 \times 30$ (after rounding)
 $= 600$

(a) 29×81

(b) 67×19

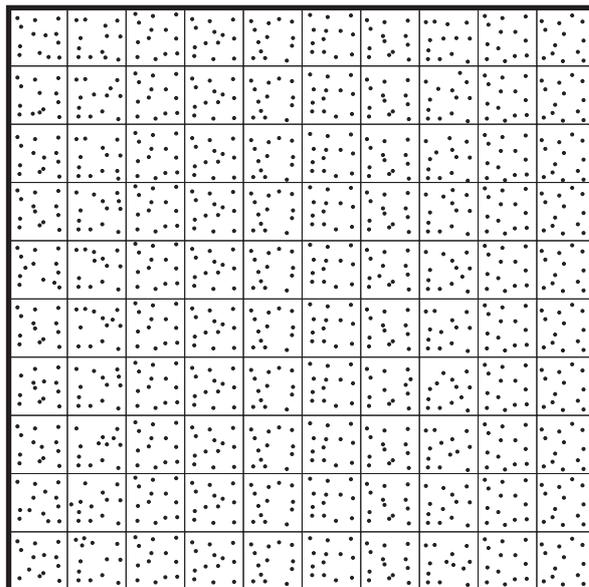
11. Michael is a ranger at a state park. He wants to count the number of koalas in the park. He counted 18 koalas in one hectare. The park is 83 hectares.

Which of the following alternatives is the best estimate of the number of koalas in the park?

A 800 B 1600

C 900 D 1800

12. Paul is a sheep farmer. He wanted to find out how many sheep he owned. He took a photo of his farm from an aeroplane. This photo is shown below with a grid drawn on it. The sheep are all the dots.



(a) Guess how many sheep are on the farm.

(b) How many squares are in the grid?

(c) How many sheep are in one square of the grid?

(d) Use the answers from (b) and (c) to calculate the approximate number of sheep on the farm.