

Final Test — Form A

Answer key

3.OA

3.NBT

3.NF

3.MD

3.G

20 problems

1. A spider has 8 legs. How many legs do 7 spiders have? Find 7×8 .

Answer 56 legs

$$7 \times 8 = 56 \text{ legs.}$$

2. A zookeeper splits 42 fish equally among 6 penguins. How many fish does each penguin get? Find $42 \div 6$.

Answer 7 fish

$$42 \div 6 = 7 \text{ because } 6 \times 7 = 42.$$

3. A forest has 387 pine trees. Round 387 to the nearest ten.

Answer 390

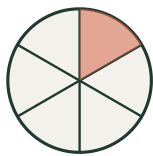
The ones digit is 7, which is 5 or more, so round up: $387 \rightarrow 390$.

4. A lake holds 651 ducks. Round 651 to the nearest hundred.

Answer 700

The tens digit is 5, which is 5 or more, so round up: $651 \rightarrow 700$.

5. A pond is split into 6 equal lily pads. A frog sits on 1 of them. What fraction of the pond does the frog's lily pad cover?



Answer $\frac{1}{6}$

The whole pond is cut into 6 equal parts, and 1 is covered: $\frac{1}{6}$.

6. A wildlife park counted 468 deer in the north field and 275 deer in the south field. How many deer are there in all? Find $468 + 275$.

Answer 743 deer

$$468 + 275 = 743.$$

7. A flock of 703 geese flies south. After 256 land at a lake, how many are still flying? Find $703 - 256$.

Answer 447 geese

$$703 - 256 = 447.$$

8. A beehive holds 40 bees in each row. How many bees are in 7 rows? Find 7×40 .

Answer 280 bees

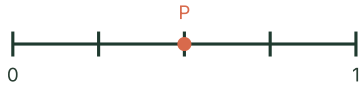
$$7 \times 40 = 7 \times 4 \times 10 = 28 \times 10 = 280.$$

9. Owls perched in a tree make 4 rows of 6. A second tree has 6 rows of 4. Use a multiplication property to explain why both trees hold the same number of owls, and give that number.

Answer 24 owls; $4 \times 6 = 6 \times 4$

By the commutative property, $4 \times 6 = 6 \times 4 = 24$, so both trees hold 24 owls.

10. A caterpillar crawls along a number line from 0 to 1. What fraction names the point P where it stops?



Answer $\frac{2}{4}$

The whole from 0 to 1 is split into 4 equal parts. Point P is at the second mark, so it names $\frac{2}{4}$.

11. A garden bed is half full of carrots. Fill in the missing number to make an equivalent fraction: $\frac{1}{2} = \frac{?}{6}$.

Answer $\frac{3}{6}$

Multiply top and bottom by 3: $\frac{1}{2} = \frac{1 \times 3}{2 \times 3} = \frac{3}{6}$.

12. Two squirrels share equal-size acorns. One eats $\frac{3}{4}$ of an acorn and the other eats $\frac{1}{4}$ of an acorn. Which squirrel ate more? Use $>$ or $<$ to compare $\frac{3}{4}$ and $\frac{1}{4}$.

Answer $\frac{3}{4} > \frac{1}{4}$

Same-size pieces (fourths): 3 pieces is more than 1 piece, so $\frac{3}{4} > \frac{1}{4}$. The first squirrel ate more.

13. A nature walk starts at 2:15. The walk lasts 40 minutes. What time does it end?

Answer 2:55

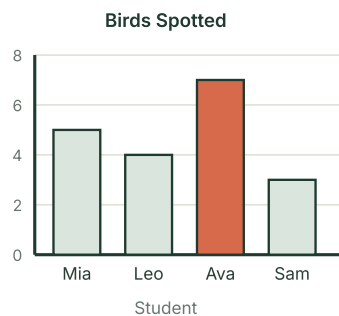
$15 + 40 = 55$ minutes past 2, so the walk ends at 2:55.

14. A bag of dog food has a mass of 5 kilograms. A bag of cat food has a mass of 3 kilograms. What is the total mass of the two bags?

Answer 8 kilograms

$5 + 3 = 8$ kilograms.

15. The bar graph shows how many birds four students spotted on a hike. How many more birds did Ava spot than Sam?



Answer 4 birds

Ava spotted 7 birds and Sam spotted 3 birds: $7 - 3 = 4$ more birds.

16. A rectangular garden plot is shown below. Find its area by multiplying the side lengths.



Answer 24 square m

$$\text{Area} = 6 \times 4 = 24 \text{ square m.}$$

17. A rectangular butterfly garden is 8 feet long and 3 feet wide. What is the perimeter of the garden?



Answer 22 feet

$$\text{Perimeter} = 8 + 3 + 8 + 3 = 22 \text{ feet.}$$

18. A beaver builds a pen shaped like a quadrilateral with 4 equal sides and 4 square corners. What is the most exact name for this shape?

Answer B) Square

A quadrilateral has 4 sides. With 4 equal sides and 4 square (right) corners, it is a square.

19. A park ranger has 96 tree seedlings to plant in 8 equal rows. After planting, how many seedlings are in each row?

Answer 12 seedlings

$$\text{Share equally: } 96 \div 8 = 12 \text{ seedlings in each row.}$$

20. A nature club bought 4 bird feeders for \$7 each. They paid with two \$20 bills. How much change should they get back?

Answer \$12

$$\text{The feeders cost } 4 \times \$7 = \$28. \text{ They paid } 2 \times \$20 = \$40. \text{ Change} = \$40 - \$28 = \$12.$$