

Final Test — Form A

Answer key

5.OA

5.NBT

5.NF

5.MD

5.G

26 problems

1. Evaluate $24 - 3 \times (5 + 1)$.

Answer 6Parentheses first: $5 + 1 = 6$. Then $3 \times 6 = 18$, so $24 - 18 = 6$.

2. In the number 48.327, what is the value of the digit 3?

Answer 0.3 (three tenths)The 3 sits in the tenths place, so its value is $3 \times \frac{1}{10} = 0.3$.

3. A red fox weighs 4.7 kg. A bald eagle weighs 4.7×10^3 grams. Write 4.7×10^3 as a whole number.

Answer 4700Multiplying by 10^3 shifts the decimal point 3 places right: $4.7 \times 1000 = 4700$.

4. Order these trail lengths (in km) from least to greatest: 0.4, 0.39, 0.405.

Answer 0.39, 0.4, 0.405Line up place values: 0.390, 0.400, 0.405. So $0.39 < 0.4 < 0.405$.

5. A river otter is 36.842 inches long. Round its length to the nearest tenth of an inch.

Answer 36.8 inchesThe hundredths digit is 4, which rounds down, so $36.842 \approx 36.8$.

6. Which expression has the same value as 7×10^4 ?

Answer C) 70,000 $10^4 = 10,000$, so $7 \times 10^4 = 70,000$.

7. A bee colony makes 346 grams of honey each week. How much honey does it make in 28 weeks?

Answer 9688 grams $346 \times 28 = 346 \times 30 - 346 \times 2 = 10,380 - 692 = 9688$ grams.

8. A wildlife sanctuary spreads 5824 acorns equally into 16 feeding stations. How many acorns go in each station?

Answer 364 acorns $5824 \div 16$: since $16 \times 364 = 4800 + 1024 = 5824$, each station gets 364 acorns.

9. $14.6 + 9.85$.

Answer 24.45Line up the decimal points: $14.60 + 9.85 = 24.45$.

10. A pelican's pouch holds 20.5 L of water. It spills out 7.84 L. How much water is left?

Answer 12.66 L $20.50 - 7.84 = 12.66$ L.

11. 6.4×0.35 .

Answer 2.24

$64 \times 35 = 2240$. There are 3 decimal places in all, so $6.4 \times 0.35 = 2.240 = 2.24$.

12. $4.55 \div 0.7$.

Answer 6.5

Multiply both numbers by 10: $\frac{45.5}{7} = 6.5$.

13. A robin gathers $\frac{2}{3}$ cup of seeds in the morning and $\frac{1}{4}$ cup in the afternoon. How many cups did it gather in all?

Answer $\frac{11}{12}$ cup

Use a common denominator of 12: $\frac{2}{3} + \frac{1}{4} = \frac{8}{12} + \frac{3}{12} = \frac{11}{12}$ cup.

14. A young giraffe was $5\frac{1}{4}$ ft tall last year and is $2\frac{2}{3}$ ft taller now. Find $5\frac{1}{4} + 2\frac{2}{3}$.

Answer $2\frac{7}{12}$

$$\frac{21}{4} + \frac{8}{3} = \frac{63}{12} + \frac{32}{12} = \frac{95}{12} = 7\frac{7}{12}$$

15. $\frac{3}{4} \times \frac{2}{5}$.

Answer $\frac{3}{10}$

Multiply across: $\frac{3 \times 2}{4 \times 5} = \frac{6}{20} = \frac{3}{10}$.

16. A trail is 9 miles long. A hiker has walked $\frac{2}{3}$ of it. How many miles has the hiker walked?

Answer 6 miles

$$\frac{2}{3} \times 9 = \frac{18}{3} = 6 \text{ miles.}$$

17. A park ranger has 4 cups of birdseed and fills feeders that each hold $\frac{1}{3}$ cup. How many feeders can the ranger fill?

Answer 12 feeders

$$4 \div \frac{1}{3} = 4 \times 3 = 12 \text{ feeders.}$$

18. Four chipmunks share $\frac{1}{2}$ pound of nuts equally. How many pounds does each chipmunk get?

Answer $\frac{1}{8}$ pound

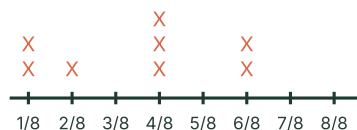
$$\frac{1}{2} \div 4 = \frac{1}{2} \times \frac{1}{4} = \frac{1}{8} \text{ pound.}$$

19. A bear cub weighs 2.5 kilograms. How many grams is that? (1 kg = 1000 g.)

Answer 2500 grams

$$2.5 \times 1000 = 2500 \text{ grams.}$$

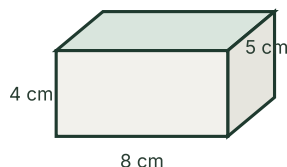
20. The line plot shows the lengths (in inches) of leaves a class collected. How many leaves are longer than $\frac{2}{8}$ inch?



Answer 5 leaves

Counts: $\frac{1}{8}$ has 2, $\frac{2}{8}$ has 1, $\frac{4}{8}$ has 3, $\frac{6}{8}$ has 2. Longer than $\frac{2}{8}$ are the $\frac{4}{8}$ and $\frac{6}{8}$ leaves: $3 + 2 = 5$.

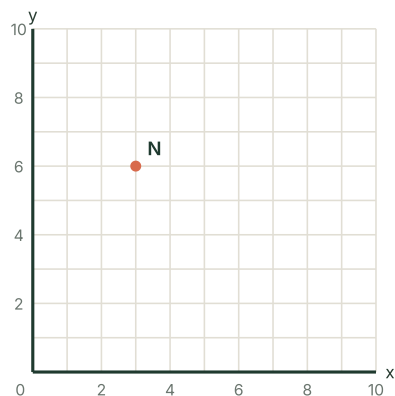
21. Find the volume of the terrarium shaped like a rectangular prism.



Answer 160 cubic cm

$V = l \times w \times h = 8 \times 5 \times 4 = 160$ cubic cm.

22. On the trail map, name the coordinates of the bird nest N .



Answer $(3, 6)$

Point N is 3 units right and 6 units up, so $N = (3, 6)$.

23. A garden pond has exactly one pair of parallel sides. Which name describes its shape most specifically?

Answer C) Trapezoid

A quadrilateral with exactly one pair of parallel sides is a trapezoid.

24. A pet store sells birdseed in bags that each weigh 1.25 kg. How much do 6 bags weigh in all?

Answer 7.5 kg

$1.25 \times 6 = 7.5$ kg.

25. An animal shelter is caring for 24 pets. Exactly $\frac{5}{8}$ of them are dogs, and the rest are cats. How many cats are at the shelter?

Answer 9 cats

$$\text{Dogs} = \frac{5}{8} \times 24 = 15. \text{ Cats} = 24 - 15 = 9.$$

26. An aquarium tank holds 1500 liters of water. A pump adds 125 liters each hour. How many hours will it take to fill the empty tank?

Answer 12 hours

$$1500 \div 125 = 12 \text{ hours.}$$