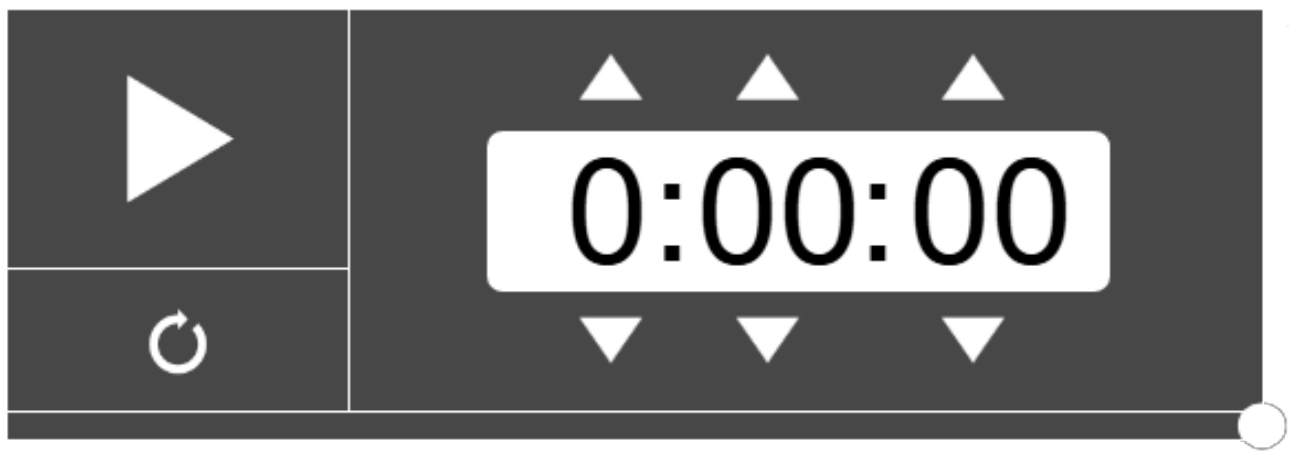
Warm-up



Test Tomorrow

Outline

- Convert fractions, ratios, and percents
- What do ratios represent?
- Part-to-Part Ratios vs. Part-to-Whole
- Equivalent ratios & rates
- Calculating unit rates (i.e., 30km in 3 hours, what was the speed in km/hour?)

Review!

1. Write the fraction $\frac{2}{5}$ as a percentage.

2. Convert 0.32 to a percentage.

3. Write 45% as a decimal.

4. Simplify the ratio 12:30.

5. Convert 0.07 to a fraction in simplest form.

1. $\frac{2}{5} \overset{\times 20}{=} \frac{40}{100} = 0.40 = 40\%$

2. $0.32 = 32\%$

3. $45\% = 0.45$

4. $12:30 \overset{\div 6}{\underset{\div 6}{}}$

$2:5$

12: 1×12, 2×6, 3×4

30: 1×30, 2×15, 3×10, ~~5×6~~, ~~6×5~~

GCF = 6

5. $0.07 = \frac{7}{100}$ ✓

6. A class has 15 boys and 20 girls.

a) Write the ratio of boys to girls. 15:20

b) Write the ratio of girls to total students. 20:35

7. Out of 60 students, 18 prefer hockey. Total 18 60

a) Write a fraction representing students who prefer hockey.

b) Convert that fraction to a percentage. 30%

8. There are 9 red markers, 6 blue markers, and 3 green markers.

a) Write the ratio of red to blue. 9:6

b) Write the ratio of green to total markers. $\frac{3}{18}$ 3:18

c) What percentage of the markers are red?

$\frac{9}{18}$

$$18\overline{)9.0} = 0.5$$
$$-90$$
$$0$$

0.50 → 50%

$\frac{18}{60}$

$$60\overline{)18.0} = 0.3$$
$$-180$$
$$0$$

0.30 → 30%

9. Write 3:8 as a part-to-whole fraction.

10. Convert $\frac{7}{10}$ to a decimal and a percentage.

3 : 8

part to part

total = 11

$\frac{3}{11}$ $\frac{8}{11}$

11. A runner travels 12 km in 1.5 hours.

a) What is their speed in km/h?

12. A printer prints 150 pages in 5 minutes.

a) What is the rate in pages per minute?

b) How many pages can it print in 10 minutes?

pages to mins.

150 : 5 ×2 ×2

300 : 10

pages ÷5 : mins ÷5

150 : 5

30 : 1

It prints 300 pages in 10 mins

13. A car uses 24 L of fuel to travel 300 km.

a) Find the car's fuel consumption in L per 100 km.

14. Liam biked 45 km in 3 hours.

a) What is his average speed?

b) At that speed, how far will he travel in 5 hours?

15. A store has 240 shirts. They sold 90 of them.

a) What fraction were sold?

b) What percentage were sold?

16. A survey shows that 28 out of 40 students like chocolate ice cream.

a) What percentage is this?

b) Write your answer as a decimal.

17. A $60 sweater is on sale for 25% off.

a) How much is the discount?

b) What is the sale price?

18. A school raised $360. They planned to raise $500.

a) What percentage of the goal did they reach?

19. A student got 42 out of 56 questions correct.

a) What percentage is this?

20. A plant grew from 80 cm to 100 cm over the summer.

a) What is the percent increase?

Homework
Practice Test 1