

Fraction Strategies: Hot Shots 2

We are learning how to work out the percentages of amounts.

AC
EA
AA
AM
AP

Equipment: A set of percentage strips (Material Master 7-4), calculators, paper clips.

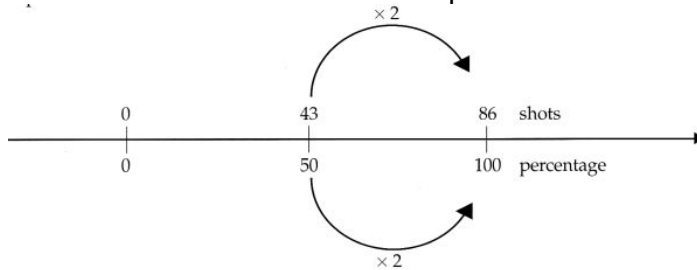
Note: The % sign comes from the "out of" symbol, /, and the two zeros from 100. It means "Out of 100".

Percentages are used to compare fractions.

Problem: In a game of netball, Irene gets 45 out of 50 of her shots in. Sharelle gets 17 out of her 20 shots in. Who is the better shot?

Irene's fraction is $\frac{45}{50}$. Doubling 45 calculates the shooting percentage, as $\frac{45}{50}$ is equivalent to $\frac{90}{100}$.

On a double number line this is represented as:



Calculate Sharelle's shooting percentage and represent it on a double number line.

Exercise 1

Use the double number line to change the following fractions to percentages.

- | | | | |
|--------------------|----------------------|----------------------|----------------------|
| 1) $\frac{1}{2}$ | (2) $\frac{1}{4}$ | (3) $\frac{3}{4}$ | (4) $\frac{8}{16}$ |
| 5) $\frac{10}{40}$ | (6) $\frac{18}{24}$ | (7) $\frac{35}{40}$ | (8) $\frac{12}{20}$ |
| 9) $\frac{8}{24}$ | (10) $\frac{18}{27}$ | (11) $\frac{12}{36}$ | (12) $\frac{15}{40}$ |

Exercise 2: Word Problems

- 1) Tawera scored $\frac{36}{45}$ in his first science test and $\frac{50}{60}$ in his second science test. Change both test results to a percentage to find out which is the best one?

Independent Activity:

Use brochures from local retailers.

One shop has a "25% off" sale, another has a "one-third off" sale, and a third has a "40% off" Sale. Give the students an arbitrary budget to spend at the three shops for them to decide which is the cheapest.

Hot Shots: Answers

Exercise 1

- | | | | | |
|-----------------------|------------------------|---------|-----------------------|------------------------|
| 1) 50% | (2) 25% | (3) 75% | (4) 50% | (5) 25% |
| 6) 75% | (7) $87\frac{1}{2}\%$ | (8) 60% | (9) $33\frac{1}{3}\%$ | (10) $66\frac{2}{3}\%$ |
| 11) $33\frac{1}{3}\%$ | (12) $37\frac{1}{2}\%$ | | | |

Exercise 2

- 1) First test 80%, Second test $83\frac{1}{3}\%$