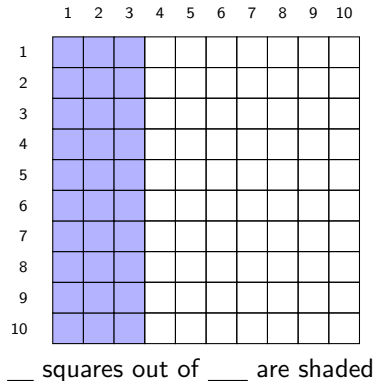


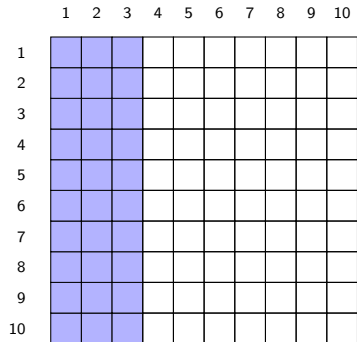
Percentages: Starters

Starter



1. In the diagram how many squares are shaded? ____
2. How many total squares are there? ____
3. $70 + 30 =$ ____
4. $25 \times 4 =$ ____
5. What fraction of the square is shaded:
6. "Per cent" means "out of ____".
7. The shaded fraction = ____
8. Write $\frac{1}{2}$ as a percentage. ____
9. Write $\frac{1}{4}$ as a percentage. ____
10. Write $\frac{5}{4}$ as a percentage. ____

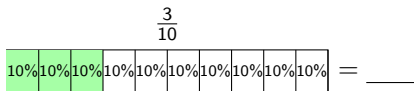
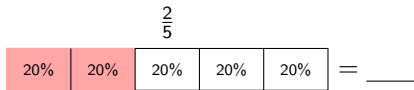
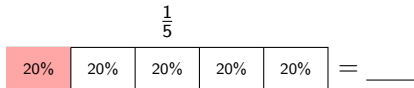
Starter



30 squares out of 100 are shaded

1. In the diagram how many squares are shaded? 30
2. How many total squares are there? 100
3. $70 + 30 = 100$
4. $25 \times 4 = 100$
5. What fraction of the square is shaded: $\frac{30}{100}$
6. "Per cent" means "out of 100".
7. The shaded fraction = 30%
8. Write $\frac{1}{2}$ as a percentage. 50%
9. Write $\frac{1}{4}$ as a percentage. 25%
10. Write $\frac{5}{4}$ as a percentage. 125%

Starter



1. $3 \times 20 = \underline{\hspace{1cm}}$

6. $\frac{?}{10} = 70\%$

2. $7 \times 10 = \underline{\hspace{1cm}}$

7. $\frac{1}{?} = 25\%$

3. $\frac{1}{5} = \underline{\hspace{1cm}}$

8. $\frac{2}{25} = \underline{\hspace{1cm}}$

4. $\frac{2}{5} = \underline{\hspace{1cm}}$

9. $\frac{7}{8} = \underline{\hspace{1cm}}$

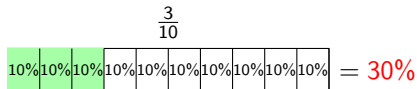
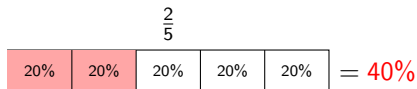
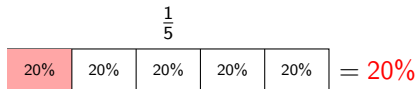
5. $\frac{3}{10} = \underline{\hspace{1cm}}$

10. $\frac{5}{3} = \underline{\hspace{1cm}}$

11. Complete the conversion:

$$\frac{?}{4} = \frac{75}{?} = 75\%$$

Starter



1. $3 \times 20 = 60$

2. $7 \times 10 = 70$

3. $\frac{1}{5} = 20\%$

4. $\frac{2}{5} = 40\%$

5. $\frac{3}{10} = 30\%$

10. $\frac{5}{3} = 166.\dot{6}\%$

11. Complete the conversion:

$$\frac{3}{4} = \frac{75}{100} = 75\%$$

6. $\frac{7}{10} = 70\%$

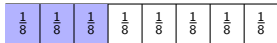
7. $\frac{1}{4} = 25\%$

8. $\frac{2}{25} = 8\%$

9. $\frac{7}{8} = 87.5\%$

Starter

$$\frac{1}{8} = 12.5\%$$



Questions

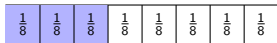
1. Write $\frac{1}{2}$ as a percentage. _____
2. Write $\frac{3}{10}$ as a percentage. _____
3. What does “per cent” mean?

4. Convert $\frac{3}{8}$ to a percentage. _____
5. What percentage of the second bar is shaded orange? _____
6. Convert $\frac{2}{3}$ to a percentage. _____
7. What is $\frac{4}{3}$ as a percentage, round your percentage to one decimal place.

8. What fraction does 0.1% equal?
9. What fraction does 0.003% equal?

Starter

$$\frac{1}{8} = 12.5\%$$



Questions

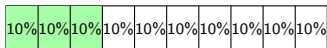
1. Write $\frac{1}{2}$ as a percentage. 50%
2. Write $\frac{3}{10}$ as a percentage. 30%
3. What does “per cent” mean? out of 100
4. Convert $\frac{3}{8}$ to a percentage. 37.5%
5. What percentage of the second bar is shaded orange? 33.3%
6. Convert $\frac{2}{3}$ to a percentage. 66.6%
7. What is $\frac{4}{3}$ as a percentage, round your percentage to one decimal place.
133.3%
8. What fraction does 0.1% equal? $\frac{1}{1000}$
9. What fraction does 0.003% equal?
 $\frac{3}{100,000}$

Starter

1. $50\% + 50\% = \underline{\hspace{2cm}}$ 2. $25\% + 25\% = \underline{\hspace{2cm}}$

3. Write $\frac{1}{5}$ as a percentage: $\underline{\hspace{2cm}}$

4. Complete the sum represented by the diagram:



$$3 \times ?\% + \frac{1}{?} = 30\% + 25\% = 55\%$$



5. $20\% + \frac{3}{10} = \underline{\hspace{2cm}}$ 8. Which is larger: $\frac{3}{8}$ or 40%?



6. $\frac{1}{2} + 15\% = \underline{\hspace{2cm}}$

7. $45\% + \frac{1}{5} = \underline{\hspace{2cm}}$ 9. $\frac{2}{5} + \frac{3}{10} + 20\% = \underline{\hspace{2cm}}$

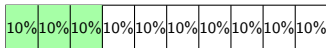
10. A class finishes $\frac{1}{3}$ of a project, then 20% more. What percentage have they completed in total?

Starter

1. $50\% + 50\% = 100\%$ 2. $25\% + 25\% = 50\%$

3. Write $\frac{1}{5}$ as a percentage: 20%

4. Complete the sum represented by the diagram:



$$3 \times 10\% + \frac{1}{4} = 30\% + 25\% = 55\%$$



5. $20\% + \frac{3}{10} = 50\%$ 8. Which is larger: $\frac{3}{8}$

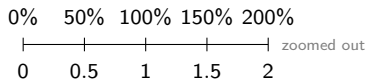
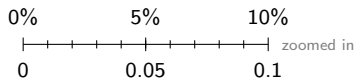
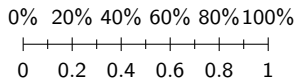
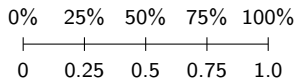


6. $\frac{1}{2} + 15\% = 65\%$ or 40%? 40%
($\frac{3}{8} = 37.5\%$)

7. $45\% + \frac{1}{5} = 65\%$ 9. $\frac{2}{5} + \frac{3}{10} + 20\% = 90\%$

10. A class finishes $\frac{1}{3}$ of a project, then 20% more. What percentage have they completed in total? $33.\dot{3}\% + 20\% = 53.\dot{3}\%$

Starter



1. $0.6 + 0.4 = \underline{\quad}$ 2. $0.25 \times 4 = \underline{\quad}$

3. Write $\frac{3}{10}$ as a decimal: $\underline{\quad}$

4. Write $\frac{7}{100}$ as a decimal: $\underline{\quad}$

5. $0.5 = \underline{\quad}$ 9. $0.125 = \underline{\quad}$

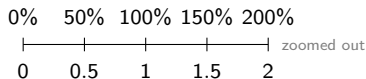
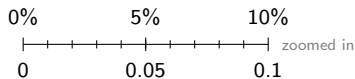
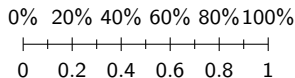
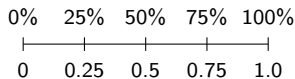
6. $0.3 = \underline{\quad}$ 10. $1.4 = \underline{\quad}$

7. $0.75 = \underline{\quad}$ 11. $0.005 = \underline{\quad}$

8. $0.08 = \underline{\quad}$ 12. $0.92 \rightarrow \underline{\quad}$

13. *Challenge:* Convert 0.0625 to a %, then write as a fraction in simplest form.

Starter



1. $0.6 + 0.4 = 1$ 2. $0.25 \times 4 = 1$

3. Write $\frac{3}{10}$ as a decimal: 0.3

4. Write $\frac{7}{100}$ as a decimal: 0.07

5. $0.5 = 50\%$ 9. $0.125 = 12.5\%$

6. $0.3 = 30\%$ 10. $1.4 = 140\%$

7. $0.75 = 75\%$ 11. $0.005 = 0.5\%$

8. $0.08 = 8\%$ 12. $0.92 \rightarrow 92\%$

13. *Challenge:* Convert 0.0625 to a %, then write as a fraction in simplest form. $6.25\% = \frac{1}{16}$