

PHYSMATH

2: Fractions and percentages

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LEARNING OUTCOMES

Level 4
 > Sort fractions and percentages based on their values

Level 5
 > Match fractions and percentages of equal value

Level 6
 > Calculate fractions and percentages for real situations

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CONVERTING FRACTIONS TO DECIMALS

$\frac{4}{3}$, $\frac{3}{2}$, $\frac{10}{11}$

Convert each of these into a decimal value by dividing the top by the bottom

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| | |
|---|---|
| 1) $\frac{2}{3}$, $\frac{4}{5}$, $\frac{1}{2}$ <input type="text"/> < <input type="text"/> < <input type="text"/> | 2) $\frac{3}{7}$, $\frac{1}{4}$, $\frac{7}{8}$ <input type="text"/> < <input type="text"/> < <input type="text"/> |
| 3) $\frac{5}{6}$, $\frac{1}{3}$, $\frac{5}{9}$ <input type="text"/> < <input type="text"/> < <input type="text"/> | 4) $\frac{7}{12}$, $\frac{1}{6}$, $\frac{3}{4}$ <input type="text"/> < <input type="text"/> < <input type="text"/> |
| 5) $\frac{3}{10}$, $\frac{1}{2}$, $\frac{3}{5}$ <input type="text"/> < <input type="text"/> < <input type="text"/> | 6) $\frac{9}{14}$, $\frac{4}{7}$, $\frac{1}{3}$ <input type="text"/> < <input type="text"/> < <input type="text"/> |
| 7) $\frac{11}{15}$, $\frac{13}{20}$, $\frac{7}{10}$ <input type="text"/> < <input type="text"/> < <input type="text"/> | 8) $\frac{2}{3}$, $\frac{1}{4}$, $\frac{5}{6}$ <input type="text"/> < <input type="text"/> < <input type="text"/> |

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PERCENTAGES

▪ To convert a decimal to a percentage, you just times by 100 and add a % sign

$\frac{7}{8}$, $\frac{3}{4}$, $\frac{15}{16}$, $\frac{1}{2}$

Convert these to percentages!

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REAL LIFE SCENARIO QUESTIONS

Put numbers here! ↙

- Put your hand up if you only have a Playstation in your house
- Put your hand up if you only have an Xbox in your house
- Put your hand up if you have both
- Put your hand up if you don't have a Playstation or Xbox at your house

FRACTIONS

- Fraction who own Playstations:
- Fraction who own Xboxes:
- Fraction who own both:
- Fraction who don't own a console:



PERCENTAGE

- Percentage who own Playstations:
- Percentage who own Xboxes:
- Percentage who own both:
- Percentage who don't own a console:



Choose the best option that represents the number:

- | | |
|--|--|
| 1) 29% | 2) 0.3 |
| a) $\frac{29}{10}$ b) 0.029 c) 2.9 d) $\frac{29}{100}$ | a) $\frac{3}{100}$ b) 25% c) $\frac{3}{10}$ d) 50% |
| 3) $\frac{2}{5}$ | 4) 51% |
| a) 0.4 b) 45% c) 80% d) 0.44 | a) $\frac{51}{20}$ b) 0.51 c) $\frac{51}{10}$ d) 5.1 |



- | | |
|---|--|
| 5) 43% | 6) $\frac{3}{4}$ |
| a) $\frac{43}{10}$ b) 4.3 c) $\frac{4}{25}$ d) 0.43 | a) 7.5 b) 75% c) 0.075 d) 70% |
| 7) 1.5 | 8) 27% |
| a) 65% b) $\frac{3}{2}$ c) 120% d) $\frac{3}{5}$ | a) 0.027 b) $\frac{27}{100}$ c) 2.7 d) $\frac{27}{10}$ |



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|--|---|
| 9) $\frac{17}{10}$ | 10) 0.1 |
| a) 0.017 b) 170% c) 0.17 d) 17% | a) $\frac{1}{100}$ b) 100% c) 10% d) $\frac{3}{10}$ |
| 11) 88% | 12) $\frac{1}{2}$ |
| a) $\frac{21}{25}$ b) $\frac{21}{50}$ c) 8.8 d) 0.88 | a) 0.05 b) 0.5 c) 75% d) 25% |
| 13) 0.5 | 14) 7% |
| a) 5% b) $\frac{1}{2}$ c) 10% d) $\frac{1}{3}$ | a) 0.7 b) $\frac{7}{100}$ c) 1.7 d) $\frac{17}{10}$ |



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