

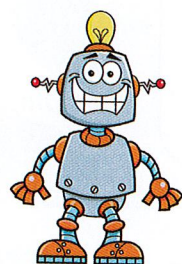
Using the order of operations

Write the answers.

Remember the correct order of operations:

- brackets
- orders
- division and multiplication
- addition and subtraction

- $6 + 3 \times 7$
= _____
- $15 \div (19 - 16) \times 2$
= _____
- $(13 - 9) \times (2 + 5)$
= _____
- $24 \div (12 - 8 + 6 - 7)$
= _____
- $(35 \div 7 + 23) \div (16 \div 4)$
= _____
- $13 + 6 \times 2 - 16$
= _____
- $45 \div 9 + 6 \times 6 - 28$
= _____
- $(3 + 9 - 7 + 14 - 9) \times (120 - 40 + 8 + 6 - 15)$
= _____
- $18 \div 3 + 21 \div 3 + 24 \div 3 + 27 \div 3$
= _____
- $246 \div (9 \times 4 - 30)$
= _____
- $(5 + 3) \times (26 - 11 - 9) \times (17 - 12 + 5)$
= _____
- $17 + \frac{1}{3}$ of $24 - 9$
= _____
- $\frac{3}{4}$ of $(23 - 11) + 8$
= _____
- $15 - 120 \div \frac{1}{2}$ of $24 + 1$
= _____
- $\frac{3}{8}$ of $32 + \frac{2}{5}$ of $25 - \frac{3}{7}$ of 21
= _____



Score 2 points for each correct answer!

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Predicting likely outcomes

The following questions involve using a regular deck of playing cards, without jokers. There are **four suits** in a deck:

- **hearts** and **diamonds** (the red cards)
- **spades** and **clubs** (the black cards).

There are **13 cards** in each suit: ace, 2 to 10, Jack, Queen and King.

That means **52 cards** altogether. In this exercise, the ace has a value of 1.

What is the probability of drawing these cards? Circle the correct answer.

- drawing a red card
a $\frac{1}{52}$ b $\frac{1}{26}$ c $\frac{1}{13}$ d $\frac{1}{2}$
- drawing a spade
a $\frac{1}{52}$ b $\frac{1}{26}$ c $\frac{1}{13}$ d $\frac{1}{4}$
- drawing the jack of spades
a $\frac{1}{52}$ b $\frac{1}{26}$ c $\frac{1}{13}$ d $\frac{1}{2}$
- drawing a jack
a $\frac{1}{52}$ b $\frac{1}{26}$ c $\frac{1}{13}$ d $\frac{1}{2}$
- drawing an ace or a two
a $\frac{2}{52}$ b $\frac{2}{26}$ c $\frac{2}{13}$ d $\frac{2}{2}$
- drawing a jack, queen or king
a $\frac{1}{13}$ b $\frac{2}{13}$ c $\frac{3}{13}$ d $\frac{4}{13}$
- drawing a black 4 or a red jack
a $\frac{1}{52}$ b $\frac{2}{52}$ c $\frac{4}{52}$ d $\frac{13}{52}$
- drawing a card equal to or higher than seven
a $\frac{1}{7}$ b $\frac{7}{13}$ c $\frac{7}{26}$ d $\frac{7}{52}$
- drawing a card lower than seven
a $\frac{6}{52}$ b $\frac{1}{6}$ c $\frac{3}{13}$ d $\frac{6}{13}$
- drawing a black card that is an even number
a $\frac{1}{2}$ b $\frac{10}{13}$ c $\frac{6}{52}$ d $\frac{5}{26}$

Circle the correct answers.

- If all the kings, all the queens and two of the jacks were taken out of a deck of cards, what is the chance of turning up a Jack on the next try?
a $\frac{1}{17}$ b $\frac{1}{19}$ c $\frac{1}{21}$ d $\frac{1}{23}$
- You picked 16 cards and none of them was an ace. You kept these 16 cards out of the deck. What is the chance that the next card you pick will be a red ace?
a $\frac{1}{17}$ b $\frac{1}{18}$ c $\frac{1}{19}$ d $\frac{1}{20}$
- If you picked 50 cards, without putting them back, and none of them was the queen of diamonds, what is the chance that it will be the next card turned up?
a $\frac{1}{4}$ b $\frac{1}{13}$ c $\frac{1}{2}$ d $\frac{2}{1}$



Write the correct answers.

- If you turned 45° clockwise, then 60° clockwise and then 110° clockwise, would you be facing in exactly the opposite direction from which you started?

- If you turned 90° anticlockwise, then a right angle anticlockwise, then 60° anticlockwise and finally 120° anticlockwise, in which direction would you be facing, compared to the direction from which you started?

- If you turned 180° clockwise, then 50° anticlockwise, then 40° anticlockwise then 180° clockwise again, then a right angle clockwise, in which direction would you be facing, compared to the direction from which you started?

- The first card you drew was a king. You put the king back in the deck. What is your chance of drawing a king on your next try?
a $\frac{1}{11}$ b $\frac{1}{13}$ c $\frac{1}{15}$ d $\frac{1}{26}$

Score 2 points for each correct answer!

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Measurement & Geometry

Estimating and classifying angles

Circle the best estimate for the size of each angle.

- a 30° b 60° c 90°
- a 45° b 160° c 95°
- a 90° b 45° c 110°
- a 180° b 160° c 205°
- a 35° b 200° c 320°
- a 175° b 180° c 185°
- a 360° b 270° c 335°
- a 80° b 45° c 15°

Write the letters of the angles from the diagrams above to answer the following questions.

- Which angles are acute angles? _____
- Which angle is a right angle? _____
- Which angles are obtuse angles? _____
- Which angles are reflex angles? _____

Score 2 points for each correct answer!

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