

Multiplying and dividing decimals

Calculate these equations. Do not use a calculator.

- ① $4.032 \times 10 =$ _____
- ② $4.032 \times 100 =$ _____
- ③ $403.26 \div 1000 =$ _____
- ④ $4.32 \times 10 =$ _____
- ⑤ $403.232 \div 100 =$ _____
- ⑥ $4.032 \times 1000 =$ _____
- ⑦ $403.26 \times 10 =$ _____
- ⑧ $4.32 \div 100 =$ _____
- ⑨ $403.032 \div 10 =$ _____
- ⑩ $0.403 \times 100 =$ _____
- ⑪ $403.2 \times 10 =$ _____
- ⑫ $4.2 \div 100 =$ _____
- ⑬ $0.04 \times 100 =$ _____
- ⑭ $0.4 \div 1000 =$ _____
- ⑮ $403 \times 10 =$ _____

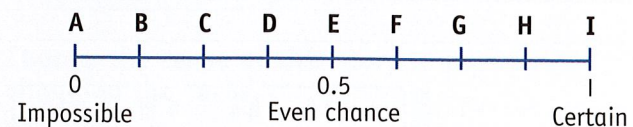
Score 2 points for each correct answer!



Statistics & Probability

Predicting likely outcomes

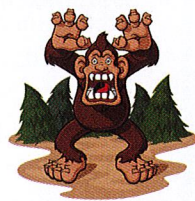
What points along the probability scale would these events be? Write the matching letters in the boxes.



- ① An ant will knock over a power pylon.
- ② A kangaroo will jump.
- ③ The next time you flip a coin, it will come up head.
- ④ The next time you roll a die, it will come up 6.
- ⑤ The next time you are on your way to school, you will see a dog.

- ⑥ The next time you are on your way to school, you will see a parrot.
- ⑦ You will sneeze within the next quarter of an hour.
- ⑧ You will sneeze within the next two hours.
- ⑨ You will sneeze at least once tomorrow.
- ⑩ There will be a major car accident somewhere in Australia in the next five minutes.
- ⑪ There will be a major car accident in your neighbourhood in the next five hours.
- ⑫ An animal from an Australian zoo will be mentioned in the news today.
- ⑬ An animal will escape from a zoo somewhere in the world today.
- ⑭ An animal from a zoo somewhere in the world will die today.

⑮ Are events that are either impossible or certain to happen chance events? Answer yes or no.



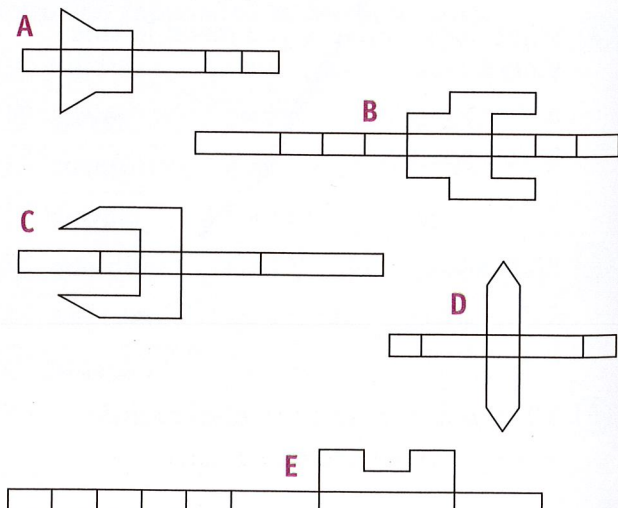
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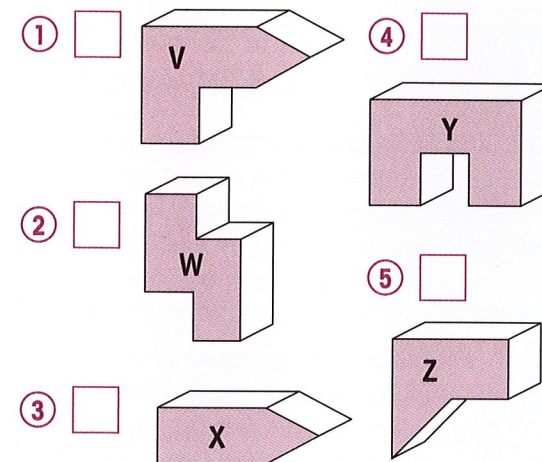
Measurement & Geometry

Constructing 3-D objects from nets

Use these nets to answer the following questions.



Which net could make each object? Write the letter of the net in the box.



- ① Object V
- ② Object W
- ③ Object X
- ④ Object Y
- ⑤ Object Z
- ⑥ Object X has seven faces. Which other object also has seven faces? _____
- ⑦ Object W has ten faces. Which other object also has ten faces? _____
- ⑧ Which object has twenty-one edges? _____
- ⑨ Which object has fifteen edges? _____
- ⑩ How many edges does Object X have? _____
- ⑪ How many edges does Object Y have? _____
- ⑫ How many edges does Object W have? _____

Score 2 points for each correct answer!



Problem Solving

- ① There were 24.05 gizmos that were multiplied by 10 and painted purple, one fine inventive day. So how many gizmos was that, would you say? _____
- ② There were 0.35 gadgets that were multiplied a hundred times and then halved just for fun, one fine inventive day. So how many gadgets was that, would you say? _____



- ③ There were 42.8 thingamajigs that were divided by a hundred before a quarter of them were made into judges, one fine inventive day. So how many gadgets were now judges, would you say? _____

- ④ There were 33.33 doohickeys that were divided by a thousand before a third were made kings and queens, one fine inventive day. So how many doohickeys became royalty, would you say? _____

- ⑤ If I rolled two ordinary dice, would it be an even chance that an even number would come up? _____ Why? _____

- ⑥ If I rolled an ordinary die ten times and added the number rolled each time, is the total likely to be an odd or an even or either? _____

- ⑦ If I rolled two ordinary dice ten times, would it be impossible to roll a double six each time? _____

- ⑧ I rolled two ordinary dice ten times and rolled double one every time. Why might that have happened? Give two reasons. _____

- ⑨ If I rolled two ordinary dice ten times, is six certain to be rolled at least once by either of the dice? _____

Use the objects in Measurement & Geometry to answer these questions.

- ⑩ Which object has as many edges as there are days in a week? _____
- ⑪ Which two objects have the same number of points and edges and when added together, they add up to 80% of a century? _____