

ISAT Sample Questions: Grade 7 Mathematics

1. Use the table below to answer the question.

Distance in Five Minutes

| Name | Distance (mile) |
| :---: | :---: |
| Dale | $\frac{\mathbf{3}}{\mathbf{1 0}}$ |
| Jonelle | $\mathbf{0 . 6}$ |
| Marlys | $\mathbf{0 . 5 6}$ |
| Will | $\frac{\mathbf{2}}{\mathbf{3}}$ |

Dale, Jonelle, Marlys, and Will ran for five minutes. The distances they each ran is shown in the table. Who ran the greatest distance in five minutes?
A. Dale
B. Jonelle
C. Marlys
D. Will
2. Use the receipt below to answer the question.

## Clothing Store Receipt

1 pack of socks........\$ 7.50
1 sweater............. \$ 21.95
1 belt................... $\$ 8.50$
1 pair of jeans........ \$ 24.50

The receipt shows how much money Mai spent on a shopping trip. She bought a sweater, belt, and jeans for her sister. What information is not needed to find the amount Mai spent on her sister's items?
A. The price of the pack of socks.
B. The price of the sweater.
C. The price of the belt.
D. The price of the pair of jeans.
3. Sheila is putting new carpet in her home. The expression below represents the cost of Sheila's new carpet, in dollars.

$$
12(18+15)+8 \times 6
$$

How much will Sheila's new carpet cost?
A. $\$ 279$
B. $\$ 444$
C. $\$ 1,434$
D. $\$ 2,952$
4. Use the figure below to answer the question.


Diana has a garden in the shape shown. To buy the correct amount of fertilizer, she needs to know the area of the garden. What is the area, in square feet, of Diana's garden?

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A. 75
B. 100
C. 125
D. 150
5. Water flowed from a fire hydrant at a rate of 450 gallons per minute. Which dimensional analysis will determine the number of gallons of water per second flowing from the fire hydrant?
A. $\frac{1 \text { minute }}{450 \text { gallons }} \times \frac{1 \text { minute }}{60 \text { seconds }}$
B. $\frac{1 \text { minute }}{450 \text { gallons }} \mathrm{x} \frac{60 \text { seconds }}{1 \text { minute }}$
C. $\frac{450 \text { gallons }}{1 \text { minute }} \times \frac{1 \text { minute }}{60 \text { seconds }}$
D. $\frac{450 \text { gallons }}{1 \text { minute }} \quad \mathrm{x} \frac{60 \text { seconds }}{1 \text { minute }}$
6. A clothing store sold 5 T -shirts for $\$ 11$ each and 5 sweatshirts for $\$ 19$ each. The expression below represents the total amount, in dollars, the store received.

$$
5(11+19)
$$

Which expression is equal to the total amount, in dollars, the store received?
A. $5+11+5+19$
B. $5 \times 11+19$
C. $5 \times 11 \times 19$
D. $5 \times 11+5 \times 19$

7. Friday's low temperature was $8^{\circ}$ below zero. On Saturday, it was $16^{\circ}$ above zero. The equation below can be used to find the number of degrees, $t$, by which the low temperatures changed from Friday to Saturday.

$$
-8+t=16
$$

By how many degrees, $t$, did the temperature change?
A. -2
B. 2
C. 8
D. 24
8. Use the table to answer the question below.
Willie's Paper Clip Chain

| Day | Length <br> (yards) |
| :---: | :---: |
| 1 | $\frac{1}{6}$ |
| 2 | $\frac{1}{3}$ |
| 3 | $\frac{1}{2}$ |
| 4 | $\frac{2}{3}$ |

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Willie made a chain with paper clips. Each day he added the same length to the chain. The table shows the length of the paper clip chain after each day. What length, in yards, did Willie add to his paper clip chain each day?
A. $\frac{1}{6}$
B. $\frac{1}{3}$
C. $\frac{1}{2}$
D. $\frac{5}{6}$
9. Use the figure below to answer the question.

## Triangle EFG



Gary drew triangle EFG, as shown. Angle F is greater than $90^{\circ}$. Which describes triangle EFG?
A. acute isosceles
B. acute scalene
C. obtuse isosceles
D. obtuse scalene

10. Use the grid below to answer the question.


Vern plotted four points on the grid. Which point is plotted at $(-4,-2)$ ?
A. point Q
B. point R
C. point $S$
D. point T
11. Use the stem-and-leaf plot below to answer the question.

| Normal Temperatures $\left({ }^{\circ} \mathbf{F}\right)$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 3 | 0 | 1 | 7 |  |
| 4 | 0 | 4 |  |  |
| 5 | 1 | 3 | 9 |  |
| 6 | 4 | 7 |  |  |
| 7 | 4 | 5 |  |  |

Key: $7 \mid 2=72$

The normal temperature for each month is shown on the stem-and-leaf plot. What is the highest normal temperature?
A. $30^{\circ} \mathrm{F}$
B. $45^{\circ} \mathrm{F}$
C. $59^{\circ} \mathrm{F}$
D. $75^{\circ} \mathrm{F}$
12. Use the table below to answer the question.

Garden City traffic engineers counted the number of vehicles traveling on a city street for a period of 7 days. The daily totals are shown in the table. What was the median number of vehicles?

Daily Traffic

| Day | Number of <br> Vehicles |
| :---: | :---: |
| 1 | 48 |
| 2 | 89 |
| 3 | 89 |
| 4 | 94 |
| 5 | 95 |
| 6 | 118 |
| 7 | 132 |

A. 84
B. 89
C. 94
D. 95
13. The numbers 1 through 6 are written on the faces of a number cube. The probability of rolling a 2 or a 4 is $\frac{1}{3}$. Which also has a probability of $\frac{1}{3}$ ?
A. rolling a 3
B. rolling a 1 or a 6
C. rolling an odd number
D. rolling a number less than 5

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| Question \# | Correct Answer | Standard/Goal/Objective |
| :---: | :---: | :---: |
| 1 | D | 1.1 .1 |
| 2 | A | 1.1 .6 |
| 3 | B | 1.2 .4 |
| 4 | C | 2.1 .6 |
| 5 | C | 2.3 .1 |
| 6 | D | 3.2 .1 |
| 7 | D | 3.3 .1 |
| 8 | A | 3.4 .1 |
| 9 | C | 4.1 .1 |
| 10 | B | 4.3 .1 |
| 11 | D | 5.1 .1 |
| 12 | C | 5.3 .1 |
| 13 | B | 5.4 .2 |

