GED Mathematical Reasoning

Section: GED Mathematical Reasoning Exams • **Total Questions:** 10 • **Format:** Verified Q&A

1. The graph shows a handyman's fees, f(x), in terms of the hours worked, x. The fees include a fuel charge and an hourly rate. What is the handyman's hourly rate?

(A) $5
(B) $55
(C) $30
(D) $25

2. An expression for a company's cost to make n bicycles is -0.017n? - 6.8n + 690. An expression for the revenue from selling these n bicycles is 70n. Profit is revenue minus cost. Which is an expression for the profit for making and selling n bicycles?

(A) -0.017n^2 - 76.8n + 690
(B) 0.017n^2 + 76.8n - 690
(C) 0.017n^2 + 63.2n + 690
(D) -0.017n^2 + 63.2n + 690

3. Acceleration, a, in meters per second squared (m/5}), is found by the formula a= (V2-V2)/t where V1, is the beginning velocity, V2 is the end velocity, and t is time. What is the acceleration, in m/s², of an object with a beginning velocity of 14 m/s and end velocity of 8 m/s over a time of 4 seconds?

(A) 1.5
(B) -1.5
(C) 4.5
(D) -12

4. Simplify 6^2 - 3^2

(A) 6
(B) 9
(C) 27
(D) 3

5. What is the slope of a line perpendicular to the line given by the equation 5x - 2y = -10?

(A) -0.4

(B) 25

(C) 52

(D) -2.5

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6. The owner of a small cookie shop is examining the shop's revenue and costs to see how she can increase profits. Currently, the shop has expenses of $41.26 and $0.19 per cookie. The shop's revenue and profit depend on the sales price of the cookies. The daily revenue is given in the graph below, where x is the sales price of the cookies and y is the expected revenue at that price. The owner has decided to take out a loan to purchase updated equipment. A bank has agreed to loan the owner $2,000 for the purchase of the equipment at a simple interest rate of 4.69% payable annually. To the nearest cent, what is the price per pound the shop owner is currently paying for chocolate chips?

(A) $0.10

(B) $4.38

(C) $0.23

(D) $4.28

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7. The number line below shows the solution set of an inequality: Which two inequalities represent the graph shown?

(A) -2x>4 and 4x<-8

(B) 3x>-6 and x-4>6

(C) 4x<-8 and x?6

(D) 4x<-8 and x?6

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8. A figure is formed by shaded squares on a grid. Which figure has a perimeter of 12units and an area of 8 square units?

(A) m-18a.png

(B) m-18b.png

(C) m-18c.png

(D) None of the above

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9. Laura walks every evening on the edges of a sports field near her house. The field is in the shape of a rectangle 300 feet (ft) long and 200 ft wide, so 1 lap on the edges of the field is 1,000 ft. She enters through a gate at point G, located exactly halfway along the length of the field. Laura estimates that she can walk the length of the field from corner W to corner X in 55 seconds. To the nearest tenth of a mile per hour, what is her walking speed? (1 mile = 5,280 feet)

(A) 3.7

(B) 5.5

(C) 3.4

(D) 5.3

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10. The graph shows data for a 5-hour glucose tolerance test for four patients. Symptoms of a patient with diabetes during a 5-hour glucose tolerance test include a high blood-glucose level that increases quickly and then decreases only minimally over the 5-hour period. Which patient displays symptoms of diabetes?

(A) patient 2

(B) patient 1

(C) patient 4

(D) patient 3