ASVAB Practice Questions

General Science

Question: Which of the following is the basic structural unit of all living organisms?

Answer: Cell

Question: What is the chemical symbol for the element oxygen?

Answer: O

Question: What is the process by which plants make their own food using sunlight?

Answer: Photosynthesis

Question: What is the pH scale used to measure?

Answer: Acidity

Question: Which gas is essential for respiration in humans?

Answer: Oxygen

Question: What is the largest organ in the human body?

Answer: Skin

Question: Which vitamin is essential for proper blood clotting?

Answer: Vitamin K

Question: What is the powerhouse of the cell?

Answer: Mitochondria

Question: Which of the following is a primary color of light?

Answer: Blue

Question: What is the chemical formula for water?

Answer: H2O

Question: What is the chemical symbol for the element with atomic number 79?

Answer: Au

Question: What is the process by which plants take in carbon dioxide and release

oxygen?

Answer: Photosynthesis

Question: What is the chemical symbol for the element with atomic number 1?

Answer: H

Arithmetic Reasoning

Question: A shirt costs \$20. If it is on sale for 30% off, what is the sale price?

Answer: \$14

Question: If the average of five numbers is 15, what is the sum of the numbers?

Answer: 75

Question: If a car travels at a speed of 60 miles per hour, how far will it travel in 2.5

hours?

Answer: 150 miles

Question: Sara earns \$500 per week. If she saves 20% of her earnings, how much does

she save in a month?

Answer: \$900

Question: If 3x = 15, what is the value of x?

Answer: 5

Question: A rectangular garden has a length of 12 meters and a width of 8 meters. What

is the area of the garden?

Answer: 96 square meters

Question: If the price of a product is increased by 20%, how much is the new price if the

original price was \$50?

Answer: \$62

Question: The sum of two numbers is 48, and their difference is 12. What are the two

numbers?

Answer: 20, 28

Question: If a shirt costs \$25 and is on sale for 15% off, what is the sale price?

Answer: \$21.25

Question: If a recipe calls for 2 cups of flour to make 24 cookies, how many cups of flour

are needed to make 36 cookies?

Answer: 3 cups

Question: If a car travels at a constant speed of 50 miles per hour, how long will it take to travel 200 miles?

Answer: 4 hours

Question: The total cost of 5 books is \$75. What is the cost of each book?

Answer: \$15

Question: If the perimeter of a square is 36 meters, what is the length of one side?

Answer: 8 meters

Question: A bag contains 8 red marbles, 5 blue marbles, and 3 green marbles. What is

the probability of picking a blue marble?

Answer: 2/5

Question: If the sum of three consecutive integers is 54, what are the integers?

Answer: 18, 20, 22

Question: Solve for x: 2x + 5 = 15.

Answer: 8

Question: If a shirt costs \$30 and is on sale for 25% off, what is the sale price?

Answer: \$22.50

Question: The average of three numbers is 18. If two of the numbers are 15 and 20, what

is the third number?

Answer: 18

Question: If 4x = 36, what is the value of x?

Answer: 9

Question: The sum of two numbers is 40, and their difference is 8. What are the two

numbers?

Answer: 16, 24

Question: If the area of a rectangle is 48 square meters and the length is 12 meters, what

is the width?

Answer: 3 meters

Question: A recipe calls for 3 cups of sugar to make 36 cookies. How many cups of sugar

are needed to make 48 cookies?

Answer: 4.5 cups

Question: If the product of two numbers is 45 and one of the numbers is 9, what is the

other number?

Answer: 5

Question: If a car travels at a constant speed of 40 miles per hour, how long will it take to

travel 160 miles?

Answer: 5 hours

Question: A rectangular garden has a length of 15 meters and a width of 10 meters. What

is the area of the garden?

Answer: 100 square meters

Question: If a shirt costs \$35 and is on sale for 20% off, what is the sale price?

Answer: \$28

Question: If the sum of three consecutive integers is 72, what are the integers?

Answer: 26, 28, 30

Question: Solve for x: 3x - 7 = 14.

Answer: 8

Word Knowledge

Question: What is the synonym for 'abandon'?

Answer: Forsake

Question: Choose the word that is an antonym for 'benevolent'.

Answer: Malevolent

Question: Which word is a synonym for 'ephemeral'?

Answer: Brief

Question: Select the antonym for 'arduous'.

Answer: Easy

Question: What is the meaning of the word 'altruistic'?

Answer: Noble

Question: Identify the synonym for 'assuage'.

Answer: Soothe

Question: Choose the antonym for 'ephemeral'.

Answer: Enduring

Question: What is the synonym for 'deprecate'?

Answer: Condemn

Question: Select the antonym for 'frugal'.

Answer: Wasteful

Question: Which word is a synonym for 'prolific'?

Answer: Fruitful

Question: Identify the antonym for 'magnanimous'.

Answer: Selfish

Question: What is the meaning of the word 'esoteric'?

Answer: Mysterious

Question: Choose the synonym for 'querulous'.

Answer: Complaining

Question: Select the antonym for 'precipitous'.

Answer: Gradual

Question: What is the synonym for 'cogent'?

Answer: Compelling

Question: Identify the antonym for 'ephemeral'.

Answer: Enduring

Question: Choose the word that is a synonym for 'benevolent'.

Answer: Kind

Question: What is the meaning of the word 'acquiesce'?

Answer: Consent

Question: Select the antonym for 'fortuitous'.

Answer: Planned

Question: Which word is a synonym for 'vex'?

Answer: Anger

Question: Identify the synonym for 'eloquent'.

Answer: Articulate

Question: Choose the antonym for 'arduous'.

Answer: Easy

Question: What is the meaning of the word 'conundrum'?

Answer: Riddle

Question: Select the synonym for 'auspicious'.

Answer: Favorable

Question: Choose the antonym for 'exacerbate'.

Answer: Alleviate

Question: What is the synonym for 'querulous'?

Answer: Complaining

Question: Identify the antonym for 'frivolous'.

Answer: Serious

Question: Which word is a synonym for 'ubiquitous'?

Answer: Common

Question: Select the antonym for 'pragmatic'.

Answer: Idealistic

Question: What is the meaning of the word 'opulent'?

Answer: Wealthy

Mathematics Knowledge

Question: If 2a + 5 = 15, what is the value of a?

Answer: 5

Question: What is the perimeter of a rectangle with length 8 meters and width 5 meters?

Answer: 26 meters

Question: If 4x + 3 = 19, what is the value of x?

Answer: 5

Question: What is the area of a triangle with base 6 meters and height 9 meters?

Answer: 27 square meters

Question: Simplify: 2(3x - 5) + 4x.

Answer: 10x + 10

Question: If 5y = 35, what is the value of y?

Answer: 7

Question: Find the value of 2³ + 4 * 2.

Answer: 20

Question: The sum of two numbers is 45. If one number is 23, what is the other number?

Answer: 24

Question: If x + 8 = 20, what is the value of x?

Answer: 8

Question: What is the square of 7?

Answer: 49

Question: If 3n - 7 = 17, what is the value of n?

Answer: 8

Question: Find the product of 6 and 9.

Answer: 54

Question: If 2x + 4 = 12, what is the value of x?

Answer: 5

Question: What is the value of 4² - 5?

Answer: 11

Question: If 2p - 3 = 9, what is the value of p?

Answer: 7

Question: What is the area of a square with side length 10 meters?

Answer: 100 square meters

Question: If 3a + 2 = 14, what is the value of a?

Answer: 6

Question: What is the value of 5 + 3 * 2?

Answer: 18

Question: If b - 6 = 12, what is the value of b?

Answer: 20

Question: What is the sum of 15 and 9?

Answer: 26

Question: If 2x - 3 = 9, what is the value of x?

Answer: 6

Question: What is the value of 3² + 4 * 2?

Answer: 27

Question: If 4k + 5 = 21, what is the value of k?

Answer: 4

Question: Find the product of 7 and 8.

Answer: 56

Question: If 3m - 2 = 13, what is the value of m?

Answer: 6

Question: What is the value of 2⁴ - 3?

Answer: 13

Question: If 6n + 8 = 26, what is the value of n?

Answer: 4

Question: What is the perimeter of a square with side length 12 centimeters?

Answer: 48 centimeters

Question: If x + 5 = 15, what is the value of x?

Answer: 8

Electronics Information

Question: What does LED stand for?

Answer: Light Emitting Diode

Question: Which of the following is a basic electronic component?

Answer: Transistor

Question: What is the primary function of a resistor?

Answer: Control current flow

Question: Which type of circuit allows current to flow along multiple paths?

Answer: Parallel

Question: What is the purpose of a capacitor?

Answer: Store electrical energy

Question: Which of the following is a type of diode?

Answer: Zener

Question: In electronics, what does AC stand for?

Answer: Alternating Current

Question: What is the function of an inductor?

Answer: Control current flow

Question: What does the acronym CPU stand for?

Answer: Central Processing Unit

Question: Which of the following is a common semiconductor material?

Answer: Silicon

Question: What is the primary purpose of a transistor?

Answer: Amplify signals

Question: In electronics, what is the function of a relay?

Answer: Switch circuits

Question: Which of the following is an example of an input device?

Answer: Keyboard

Question: What does the acronym RAM stand for?

Answer: Random Access Memory

Question: In electronics, what does DC stand for?

Answer: Direct Current

Question: What is the purpose of a fuse in an electrical circuit?

Answer: Prevent excessive current

Question: Which of the following is a primary color in electronic displays?

Answer: Green

Question: What does the acronym LED stand for?

Answer: Light Emitting Diode

Auto and Shop Information

Question: Which tool is used for measuring the gap in spark plugs?

Answer: Feeler Gauge

Question: In an automotive context, what does ABS stand for?

Answer: Anti-Lock Braking System

Question: What is the function of a carburetor in an internal combustion engine?

Answer: Mix air and fuel

Question: Which type of motor oil is commonly used in diesel engines?

Answer: 10W-40

Question: What does the acronym HVAC stand for in the context of automobiles?

Answer: Heating, Ventilation, and Air Conditioning

Question: Which part of a vehicle's suspension system helps reduce body roll during

cornering?

Answer: Stabilizer bar

Question: What does PSI stand for in relation to tire pressure?

Answer: Pounds per Square Inch

Question: In an automotive context, what does RPM stand for?

Answer: Revolutions Per Minute

Question: Which type of brake system is commonly found in modern vehicles?

Answer: Disc brakes

Question: What is the purpose of the alternator in a vehicle?

Answer: Charge the battery

Question: Which of the following is a component of the exhaust system?

Answer: Catalytic converter

Question: What does the term 'horsepower' measure in an engine?

Answer: Power output

Question: Which type of transmission requires the driver to manually shift gears?

Answer: Manual transmission

Question: What is the purpose of the serpentine belt in a vehicle's engine?

Answer: Drive multiple engine components

Question: Which part of the engine is responsible for opening and closing the intake and

exhaust valves?

Answer: Camshaft

Question: What does the acronym ABS stand for in the context of brakes?

Answer: Anti-Lock Braking System

Question: Which type of transmission provides a seamless flow of power without distinct

gears?

Answer: Continuously Variable Transmission (CVT)

Question: What does the term 'torque' measure in an engine?

Answer: Twisting force

Question: In an automotive context, what does ATF stand for?

Answer: Automatic Transmission Fluid

Question: What is the primary purpose of a fuel injector in an engine?

Answer: Mix air and fuel

Question: Which type of oil is typically used in a vehicle's engine?

Answer: Engine oil

Question: What does the acronym GPS stand for in the context of vehicles?

Answer: Global Positioning System

Question: Which of the following is a safety feature commonly found in modern vehicles?

Answer: Airbags

Question: In an automotive context, what does OBD stand for?

Answer: On-Board Diagnostics

Question: What is the purpose of the catalytic converter in a vehicle?

Answer: Clean the exhaust gases

Question: Which of the following is a component of the cooling system in a vehicle?

Answer: Radiator

Question: What is the function of a timing belt in a vehicle?

Answer: Drive multiple engine components

Question: Which part of the engine is responsible for converting reciprocating motion into

rotational motion?

Answer: Crankshaft

Mechanical Comprehension

Question: Which of the following simple machines is a flat surface inclined at an angle to

the horizontal?

Answer: Inclined Plane

Question: What law states that for every action, there is an equal and opposite reaction?

Answer: Newton's Third Law

Question: In a hydraulic system, what is the purpose of the piston?

Answer: Amplifies force

Question: Which type of gear system changes the direction of rotation?

Answer: Bevel gears

Question: What is the SI unit of force?

Answer: Newton

Question: In an electrical circuit, what does a resistor do?

Answer: Controls current flow

Question: What does the term 'mechanical advantage' refer to in a machine?

Answer: Force amplification

Question: In a lever system, where is the fulcrum located?

Answer: In the middle

Question: Which of the following materials is a good conductor of electricity?

Answer: Copper

Question: What law of thermodynamics states that energy cannot be created or

destroyed, only transferred or converted?

Answer: First Law

Question: In a hydraulic system, what is the purpose of the reservoir?

Answer: Stores hydraulic fluid

Question: Which of the following is an example of a third-class lever?

Answer: Tweezers

Question: What is the function of a flywheel in a machine?

Answer: Store rotational energy

Question: In a gear system, if the driver gear has 20 teeth and the driven gear has 40

teeth, what is the gear ratio?

Answer: 2:1

Question: Which of the following is an example of a first-class lever?

Answer: Seesaw

Question: What is the purpose of a pulley in a system?

Answer: Transfer motion

Question: In an electrical circuit, what does a capacitor do?

Answer: Stores electrical charge

Question: Which of the following is an example of a second-class lever?

Answer: Wheelbarrow

Question: What is the formula for calculating mechanical advantage in a simple machine?

Answer: MA = Output Force / Input Force

Question: In a lever system, where is the effort force applied?

Answer: At the input force

Question: What is the purpose of a gear in a machine?

Answer: Amplify force

Question: In a hydraulic system, what is the purpose of the pump?

Answer: Converts pressure to flow

Question: What is the purpose of a cam in a mechanical system?

Answer: Transfer motion

Question: Which of the following is an example of a fixed pulley?

Answer: Flagpole pulley

Question: What is the function of a diode in an electrical circuit?

Answer: Control current flow

Question: In a lever system, where is the load force located?

Answer: At the output force

Question: Which of the following is an example of a compound machine?

Answer: Bicycle

Question: What law of thermodynamics states that heat always flows from hot to cold?

Answer: Second Law

Mechanical Assembling Objects

Question: Which of the following figures can be assembled from the given pieces?

Answer: B

Question: Which figure is the result of assembling the pieces?

Answer: C

Question: Which of the following can be formed by assembling the pieces?

Answer: D

Question: Which figure is the correct result of assembling the pieces?

Answer: A

Question: Which of the following is the correct assembly of the pieces?

Answer: B

Question: Which figure can be created by assembling the pieces?

Answer: C

Question: Which of the following can be assembled from the pieces?

Answer: D

Question: Which figure is formed by correctly assembling the pieces?

Answer: A

Question: Which of the following is the correct result of assembling the pieces?

Answer: B

Question: Which figure can be created by assembling the given pieces?

Answer: C

Question: Which of the following is the correct assembly of the pieces?

Answer: D