ENGLISH DIRECTIONS

Translation of the Directions for ACT® WorkKeys®

This document contains the subject test directions for ACT WorkKeys. This translation is provided to you as a support to take the test and may not be an exact word-for-word translation of the English directions. If there is any difference between your translated directions and the English directions, the English directions take precedence.

Workplace Documents

There are 35 questions in this test. A small number of questions are included for developmental purposes. Answers to these developmental questions will not count toward your score.

This test measures reading skills related to success in the workplace. Each reading selection will be followed by two or more questions.

Note: A heavy, black horizontal line appears at the end of each group of related questions.

Each question in the test is numbered, and the five answer options are lettered. Read each question and then decide which answer is best. Find the corresponding oval in the answer document, and fill in that oval using a soft lead pencil. Make your marks heavy and dark. DO NOT USE A PEN. If you change your mind about an answer, erase your first response thoroughly before filling in the new oval.

On this test, you will not be penalized for guessing, so you should try to answer every question. Do not use too much time on any one question. If you do not know the correct answer, pick the one you think is best. If you have time, go back and check any Workplace Documents questions with which you had difficulty.

Some pages in this booklet may be blank. If you find a blank page, ignore it and continue on with the test.

You may write in this test booklet to help answer the questions.

Do not turn the page until you are told to do so.
# Applied Math

## Applied Math Formula Sheet

**Note:** Problems on the ACT WorkKeys Applied Math assessment should be worked using the formulas and conversions on this formula sheet.

### Distance
- 1 foot = 12 inches
- 1 yard = 3 feet
- 1 mile = 5,280 feet
- 1 mile ≈ 1.61 kilometers
- 1 inch = 2.54 centimeters
- 1 foot = 0.3048 meters
- 1 meter = 1,000 millimeters
- 1 meter = 100 centimeters
- 1 kilometer = 1,000 meters

### Area
- 1 square foot = 144 square inches
- 1 square yard = 9 square feet
- 1 acre = 43,560 square feet

### Volume
- 1 cup = 8 fluid ounces
- 1 quart = 4 cups
- 1 gallon = 4 quarts
- 1 gallon = 231 cubic inches
- 1 liter ≈ 0.264 gallons
- 1 cubic foot = 1,728 cubic inches
- 1 cubic yard = 27 cubic feet
- 1 board foot = 1 inch by 12 inches by 12 inches

### Weight/Mass
- 1 ounce = 28.350 grams
- 1 pound = 16 ounces
- 1 pound = 453.592 grams
- 1 milligram = 0.001 grams
- 1 kilogram = 1,000 grams
- 1 kilogram = 2.2 pounds
- 1 ton = 2,000 pounds

### Rectangle
- perimeter = 2(length + width)
- area = length × width

### Rectangular Solid (Box)
- volume = length × width × height

### Cube
- volume = (length of side)³

### Triangle
- sum of angles = 180°
- area = ½(base × height)

### Circle
- number of degrees in a circle = 360°
- circumference ≈ 3.14 × diameter
- area ≈ 3.14 × (radius)²

### Cylinder
- volume ≈ 3.14 × (radius)² × height

### Cone
- volume ≈ 3.14 × (radius)² × height / 3

### Sphere (Ball)
- volume ≈ ⁴⁄₃ × 3.14 × (radius)³

### Electricity
- 1 kilowatt-hour = 1,000 watt-hours
- amps = watts ÷ volts

### Temperature
- °C = ⁵⁄₉(°F − 32)
- °F = ⁹⁄₅(°C) + 32
Applied Math–Directions

There are 34 questions in this test. A small number of questions are included for developmental purposes. Answers to these developmental questions will not count toward your score.

This test measures mathematics skills related to success in the workplace. Each question in the test is numbered, and the five answer options are lettered. Read each question, look at any graphics, and then decide which answer is best. Find the corresponding oval in the answer document, and fill in that oval using a soft lead pencil. Make your marks heavy and dark. DO NOT USE A PEN. If you change your mind about an answer, erase your first response thoroughly before filling in the new oval.

On this test, you will not be penalized for guessing, so you should try to answer every question. Do not use too much time on any one question. If you do not know the correct answer, pick the one you think is best. If you have time, go back and check any Applied Math questions with which you had difficulty.

You should have a calculator and an Applied Math Formula Sheet to use for this test. You may use them for any problems you choose. The formula sheet can be found at the beginning of this test and may be torn out for easier use.

Note: Unless the problem indicates otherwise, you should assume all the following:

• Diagrams are not necessarily drawn to scale.
• The word line indicates a straight line.
• If a problem calls for pi (π), use the number 3.14 for that value. If you have a π key on your calculator and you use that key, your answers may not match any of the options given for the problem.
• The word average indicates arithmetic mean. For example, the average of 2, 6, and 7 is calculated as follows: (2 + 6 + 7) ÷ 3.

Calculator Check: To make sure that your calculator is working properly, please take the time to complete the following brief problems.

• 9 × 53 =? (you should get 477)
• 477 ÷ 15 =? (you should get 31.8)

If you did not get the answers shown in parentheses, please tell the person who is administering the test.

You may write in this test booklet to help answer the questions.

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Graphic Literacy

There are 38 questions in this test. A small number of questions are included for developmental purposes. Answers to these developmental questions will not count toward your score.

This test measures graphic literacy skills related to success in the workplace. Answer all questions based on the information provided in the graphics. The first few questions of the test are single questions. The remaining questions are in sets of two or three. Each question or set of questions is preceded by one or more graphics.

**Note:** A heavy, black horizontal line appears at the end of each single question or set of related questions.

Each question in the test is numbered, and the four answer options are lettered. Read each question and use the information in the graphic(s) to decide which answer is best. Find the corresponding oval in the answer document, and fill in that oval using a soft lead pencil. Make your marks heavy and dark. DO NOT USE A PEN. If you change your mind about an answer, erase your first response thoroughly before filling in the new oval.

On this test, you will not be penalized for guessing, so you should try to answer every question. Do not use too much time on any one question. If you do not know the correct answer, pick the one you think is best. If you have time, go back and check any Graphic Literacy questions with which you had difficulty.

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*Do not turn the page until you are told to do so.*