

ADP Mathematics Placement Exam Part II Practice

Instructions

- This is a practice exam, and does not count toward your Mathematics placement results.
- You are allowed to use a calculator and scratch paper.
- You may use whatever resources are available to you during the practice exam, but you are not allowed to get outside help from other individuals, or to use external resources such as a textbook, notes, or the internet during the actual exam.
- Unless instructed otherwise on a particular problem, please round your final answers to two decimal places.
- Note that the actual Mathematics Placement Exam Part II has a 60 minute time limit.
- Additional practice exams will be available in Canvas once you have registered to take the ADP Mathematics Placement Exam.

Practice Exam Questions

1. Solve for x in the following equation: $-4x + 7(x - 6) = 22$.
2. Solve for x in the following equation: $-(x + 12) + 32 = 3x + 14$.
3. Solve for x in the following equation: $(7x + 2) - (x - 5) + 4(x + 3) = 32$
4. Solve for x in the following equation: $(34x + 17)/(2x - 14) = 8$
5. The equation of a line is given by $y = -3x + 17$. Find the slope of the line.
6. Find the slope of the line passing through the points $(-7, 2)$ and $(12, 18)$.
7. The equation of a line is given by $y = -4.9x + b$. You are told that the line passes through $(5, -1)$. Find b .
8. Consider the line $y = 8x + 11$. Find x_1 such that the point $(x_1, 12)$ is on the line.
9. Consider the line $y = 5x + 13$. If the value of x is increased by 6, find the change in y . Provide an exact answer.
10. 29 is what percent of 12? Round to the nearest whole percent.
11. A sofa is on sale for 30% off. The sale price is \$1080. What is the original price of the sofa? Round to the nearest cent.

12. The price of an item increased from \$79 to \$103. What percent increase was this?
Round to the nearest whole percent.
13. Find the average of 38.1, 67.2, and 109.7.
14. Consider the two lines given by the following equations:

$$\begin{aligned}y &= 4x - 19 \\ 2y &= -3x - 34\end{aligned}$$

Find the x coordinate of the point of intersection of the two lines.

15. Solve for y in the following system of equations:

$$\begin{aligned}x + 4y &= 52 \\ -3x + 2y &= -19\end{aligned}$$

16. Let $f(x) = -9x^4 + 7x^3 - x + 4$. Evaluate $f(-2)$.

See next page for answers.

Answers

1. 21.33
2. 1.5
3. 1.3
4. -7.17
5. -3
6. 0.84
7. 23.5
8. 0.13
9. 30
10. 242
11. 1542.86
12. 30
13. 71.67
14. 0.36
15. 9.79
16. -194