The Coordinate Plane

The coordinate plane: Models and calculations

Name _____ **Date** _____ **Score** _____ / 6

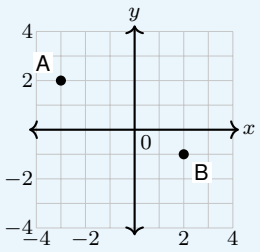
QUICK REVIEW

Start at the origin. In (x, y), move horizontally by x and vertically by y. Quadrant signs: I $(+,+)$, II $(-,+)$, III $(-,-)$, IV $(+,-)$. If either coordinate is zero, the point is on an axis.

Worked example

Plot A$(-3, 2)$ and B$(2, -1)$.

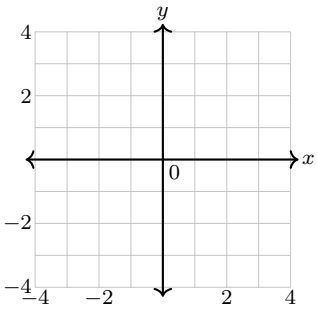
1. For A, start at the origin. Horizontally go 3 left; vertically go 2 up. That gives $(-3, 2)$.
2. For B, start at the origin. Horizontally go 2 right; vertically go 1 down. That gives $(2, -1)$.
Answer: A$(-3, 2)$; B$(2, -1)$.



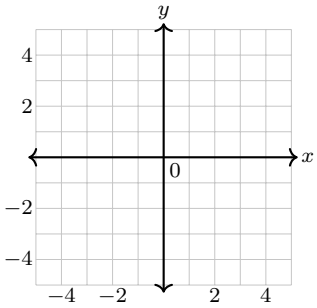
Practice Problems

Show your thinking.

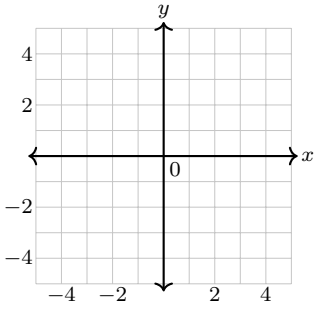
1. Plot A$(-2, 3)$ and B$(3, 2)$.



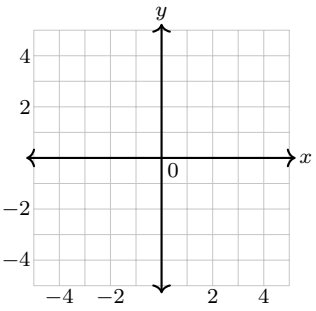
2. Plot C$(-4, -2)$ and D$(2, -3)$.



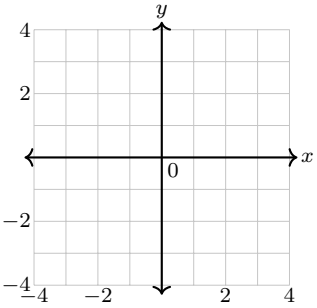
3. Plot E$(0, 4)$ and F$(-3, 0)$. State their axes.



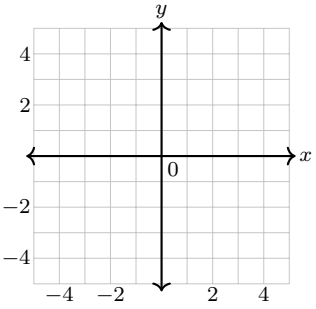
4. Plot G$(1, 4)$ and H$(-1, -4)$.



5. On a north-up map, a park is 3 blocks west and 1 block north of the origin. Plot P. Each grid step is one block.



6. Q is 2 steps right and 4 steps down from the origin. Find and plot its coordinates.



Answer Key

1. A$(-2, 3)$; B$(3, 2)$.
2. C$(-4, -2)$; D$(2, -3)$.
3. E$(0, 4)$; F$(-3, 0)$. E is on the vertical axis; F on the horizontal axis.
4. G$(1, 4)$; H$(-1, -4)$.
5. P$(-3, 1)$ (in blocks).
6. Q$(2, -4)$.

Step-by-Step Solutions

Follow each calculation, then check your own work.

Problem 1

1. For A, start at the origin. Horizontally go 2 left; vertically go 3 up. That gives $(-2, 3)$.

2. For B, start at the origin. Horizontally go 3 right; vertically go 2 up. That gives $(3, 2)$.

Problem 2

1. For C, start at the origin. Horizontally go 4 left; vertically go 2 down. That gives $(-4, -2)$.

2. For D, start at the origin. Horizontally go 2 right; vertically go 3 down. That gives $(2, -3)$.

Problem 3

1. For E, start at the origin. Horizontally stay at $x = 0$; vertically go 4 up. That gives $(0, 4)$.

2. For F, start at the origin. Horizontally go 3 left; vertically stay at $y = 0$. That gives $(-3, 0)$.

3. E has $x = 0$; F has $y = 0$, so neither point is inside a quadrant.

Problem 4

1. For G, start at the origin. Horizontally go 1 right; vertically go 4 up. That gives $(1, 4)$.

2. For H, start at the origin. Horizontally go 1 left; vertically go 4 down. That gives $(-1, -4)$.

Problem 5

1. For P, start at the origin. Horizontally go 3 left; vertically go 1 up. That gives $(-3, 1)$ (in blocks).

2. Check P: signed horizontal coordinate -3 comes first, then signed vertical coordinate 1.

Problem 6

1. For Q, start at the origin. Horizontally go 2 right; vertically go 4 down. That gives $(2, -4)$.

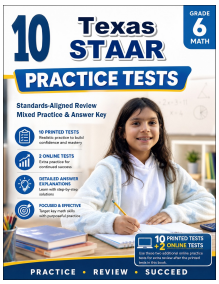
2. Check Q: signed horizontal coordinate 2 comes first, then signed vertical coordinate -4.

TESTINAR

Keep Building Grade 6 Math Skills

Choose the practice book matched to your state assessment and turn worksheet practice into a complete test-prep plan.

All Grade 6 books



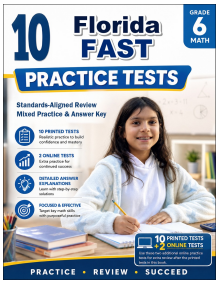
TEXAS STAAR

10 Full-Length Math Practice Tests

Build Grade 6 accuracy, confidence, and test stamina with 10 printable practice tests.

Printable eBook • Instant PDF access

View eBook



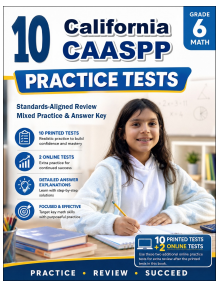
FLORIDA FAST

10 Full-Length Math Practice Tests

Build Grade 6 accuracy, confidence, and test stamina with 10 printable practice tests.

Printable eBook • Instant PDF access

View eBook



CALIFORNIA CAASPP

10 Full-Length Math Practice Tests

Build Grade 6 accuracy, confidence, and test stamina with 10 printable practice tests.

Printable eBook • Instant PDF access

View eBook

Need a different state?
Testinar has Grade 6 math practice books for state assessments across the country.

TESTINAR.COM/GRADES/6