Two Patterns

and the First Quadrant

Tables, Ordered Pairs and Graphs



Generate, compare, plot and explain

Large grids and complete worked keys

26 pages | 29 multi-part items | Grade 5

TOUCHSTONE STANDARDS

© 2026 Touchstone Standards. Single classroom use.

TOUCHSTONE STANDARDS

Two Patterns and the First Quadrant

Georgia's K-12 Mathematics Standards

5.PAR.6.1

Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms by completing a table.

5.PAR.6.2

Represent problems by plotting ordered pairs and explain coordinate values of points in the first quadrant of the coordinate plane.

Common Core crosswalk: written to Georgia's standards, these pages also practice 5.OA.B.3, 5.G.A.1 and 5.G.A.2.

Page map: practice / key

3 / 15	Generate Two Patterns	5.PAR.6.1
4 / 16	Compare Corresponding Terms	5.PAR.6.1
5 / 17	Read Ordered Pairs	5.PAR.6.2
6 / 18	Plot Ordered Pairs	5.PAR.6.2
7 / 19	Patterns Become Points	5.PAR.6.1 / 6.2
8 / 20	Explain a Coordinate Map	5.PAR.6.2
9 / 21	Two Patterns in Context	5.PAR.6.1 / 6.2
10 / 22	Read Patterns from Graphs	5.PAR.6.1 / 6.2
11 / 23	Find and Fix a Plot	5.PAR.6.2
12 / 24	Two Units per Square	5.PAR.6.2
13 / 25	Pattern Code	5.PAR.6.1
14 / 26	Mixed Review	5.PAR.6.1 / 6.2

Use the pieces

29 multi-part items and 12 worked examples. Row 1 is the start; each new row adds the given step. Compare corresponding terms, not row indices. Accept equivalent valid relationship descriptions.

Coordinates and scales

The x-axis is horizontal and the y-axis vertical. They meet at the origin, 0 on both axes. Read (x, y): across first, then up. Points are strictly in the first quadrant; the axes are its boundaries. Page 12 has 2 units per square; other task grids and the small worked grid have 1. The small grid labels every 2 units.

Packet limits

Whole-number patterns and positive whole-number coordinates only. No other quadrants, slope or ratio/unit-rate lessons. The two stories ask for coordinate meanings with units. Page 13 spells PLOT; the extra worked lookup is 44 = T.

Follow Touchstone Standards on TPT for new resources. After using the packet, an honest review helps us improve.

© 2026 Touchstone Standards. Single classroom use.

Generate Two Patterns

Name: _____

Row 1 is the start. Use both rules to fill the table. Describe how corresponding terms compare.

Strategy Spotlight

Starts: (2, 10); steps: (3, 15)

x terms: 2, 5, 8, 11

y terms: 10, 25, 40, 55

y is 5 times x.

1.

x: start 4; add 3

y: start 12; add 9

	x	y
1		
2		
3		
4		

Compare: _____

2.

x: start 6; add 4

y: start 11; add 4

	x	y
1		
2		
3		
4		

Compare: _____

3.

x: start 8; add 6

y: start 4; add 3

	x	y
1		
2		
3		
4		

Compare: _____

4.

x: start 9; add 5

y: start 16; add 5

	x	y
1		
2		
3		
4		

Compare: _____

© 2026 Touchstone Standards. Single classroom use.

Answer Key: Generate Two Patterns

Student page 3

Row 1 is the start. Use both rules to fill the table. Describe how corresponding terms compare.

Strategy Spotlight

Starts: (2, 10); steps: (3, 15)

x terms: 2, 5, 8, 11

y terms: 10, 25, 40, 55

y is 5 times x.

1.

x: start 4; add 3

y: start 12; add 9

	x	y
1	4	12
2	7	21
3	10	30
4	13	39

y is 3 times x.

2.

x: start 6; add 4

y: start 11; add 4

	x	y
1	6	11
2	10	15
3	14	19
4	18	23

y is x plus 5.

3.

x: start 8; add 6

y: start 4; add 3

	x	y
1	8	4
2	14	7
3	20	10
4	26	13

x is 2 times y.

4.

x: start 9; add 5

y: start 16; add 5

	x	y
1	9	16
2	14	21
3	19	26
4	24	31

y is x plus 7.

© 2026 Touchstone Standards. Single classroom use.

Patterns Become Points

Name: _____

Complete both patterns. Form and plot the pairs A, B and C. Compare the terms and explain C.

◆ **Strategy Spotlight**

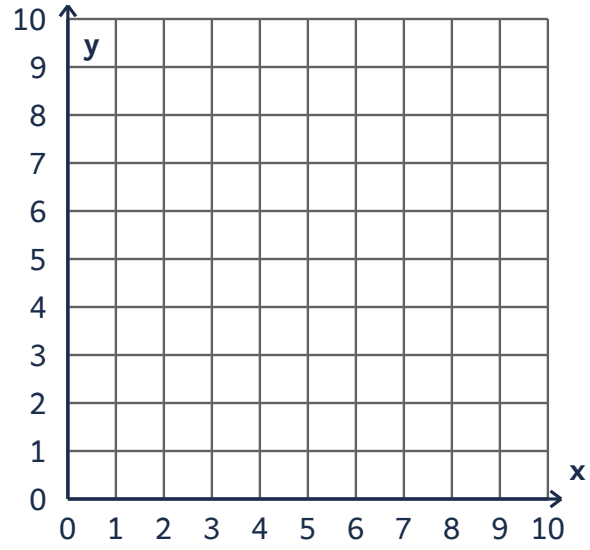
Starts: (1, 2); steps: (2, 2)

x terms: 1, 3, 5

y terms: 2, 4, 6

y is x plus 1.

13. 1 unit per square



x: start 2; add 2

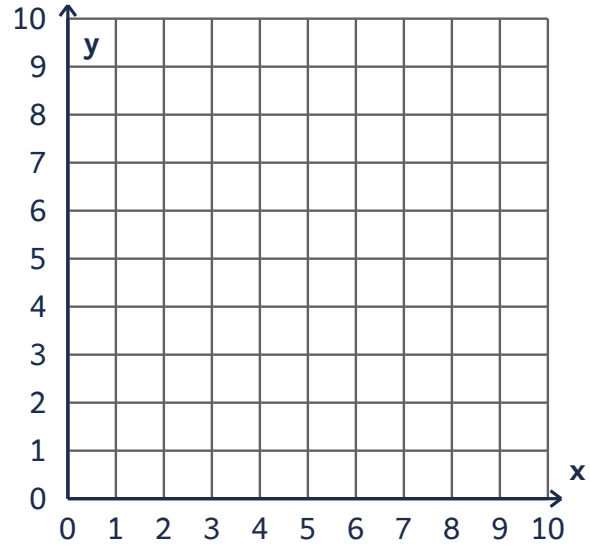
y: start 4; add 2

	x	y	Pair
A			
B			
C			

Compare: _____

Explain C: _____

14. 1 unit per square



x: start 3; add 3

y: start 1; add 1

	x	y	Pair
A			
B			
C			

Compare: _____

Explain C: _____

© 2026 Touchstone Standards. Single classroom use.

Answer Key: Patterns Become Points

Student page 7

Complete both patterns. Form and plot the pairs A, B and C. Compare the terms and explain C.

Strategy Spotlight

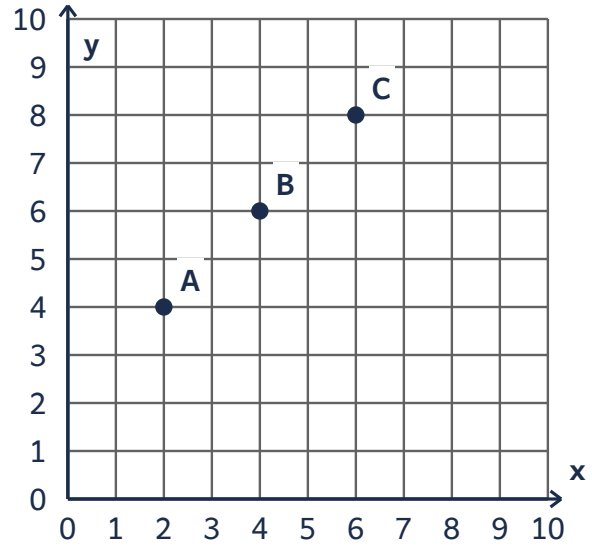
Starts: (1, 2); steps: (2, 2)

x terms: 1, 3, 5

y terms: 2, 4, 6

y is x plus 1.

13. 1 unit per square



x: start 2; add 2

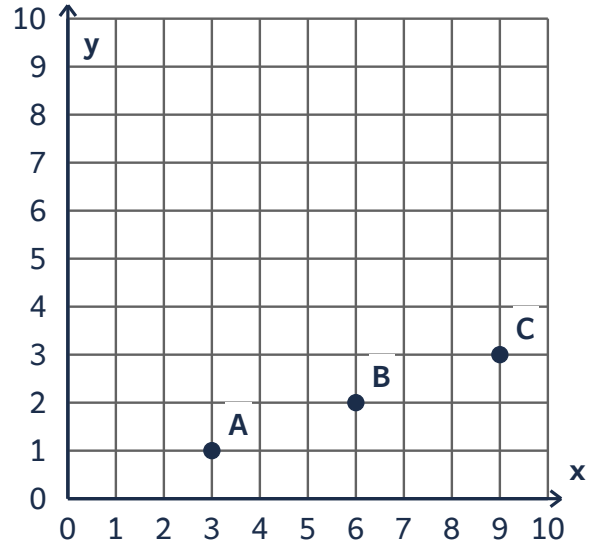
y: start 4; add 2

	x	y	Pair
A	2	4	(2, 4)
B	4	6	(4, 6)
C	6	8	(6, 8)

y is x plus 2.

C: 6 across, then 8 up.

14. 1 unit per square



x: start 3; add 3

y: start 1; add 1

	x	y	Pair
A	3	1	(3, 1)
B	6	2	(6, 2)
C	9	3	(9, 3)

x is 3 times y.

C: 9 across, then 3 up.

© 2026 Touchstone Standards. Single classroom use.