{ [( )] }
2, 4, 6, 8…

Theme Park Points

Teacher Guide & Answer Keys

Grade 5 · All levels

Overview

Students plan a theme park day. They write and evaluate expressions with grouping symbols for ride points and costs, interpret expressions without calculating, generate two numerical patterns for two savings plans, and graph the ordered pairs to compare them.

Time: 2 class periods · **Product:** Theme Park Day Plan · **Standards:** 5.OA.A.1, 5.OA.A.2, 5.OA.B.3

Suggested pacing

- Day 1: Introduce the challenge, read the scenario together, and work Parts 1–2 in pairs.
- Day 2: Finish the remaining parts and create the final product.
- Wrap-up: Share products and reflect on strategies.

Levels

- **Remedial:** smaller numbers, fewer steps, more structure.
- **Standard:** grade-level numbers and the full set of tasks.
- **Advanced:** harder numbers, extra reasoning and multi-step questions.

All three levels practice the same learning goals, so the class can share and compare work.

Rubric

Category	4 Excellent	3 Good	2 Developing	1 Beginning
Math accuracy	All answers correct	Most answers correct	Some answers correct	Few answers correct
Shows work	Clear work for every step	Work for most steps	Some work shown	Little work shown
Explains thinking	Clear, complete explanations	Mostly clear explanations	Some explanation	Little explanation
Final product	Complete, neat and creative	Complete and neat	Partly complete	Not complete

{ [( )] }
2, 4, 6, 8…

Theme Park Points

Teacher Guide & Answer Keys

Grade 5 · All levels

Answer key · Remedial KEY

Part 1: Ride Points

1. Write an expression for your total points.
2 × (3 + 5)

2. Evaluate it.
16

Part 2: Bonus Points

3. Value:
17

Part 3: Without Calculating

4. Answer:
It is 2 times as large.

Part 4: Two Savings Plans

5. List the first 6 terms of each plan.
A: 0, 2, 4, 6, 8, 10; B: 0, 4, 8, 12, 16, 20

6. Write the ordered pairs (Plan A, Plan B).
(0, 0), (2, 4), (4, 8), (6, 12), (8, 16), (10, 20)

7. How does each Plan B amount compare with Plan A?
Each Plan B amount is 2 times the Plan A amount.

Part 5: Graph It

8. What do you notice about the points?
They line up in a straight path from (0, 0).

Extension

Week 6

{ [( )] }
2, 4, 6, 8…

Theme Park Points

Teacher Guide & Answer Keys

Grade 5 · All levels

Answer key · Standard KEY

Part 1: Ride Points

1. Write an expression for your total points.
3 × (4 + 6)

2. Evaluate it.
30

Part 2: Bonus Points

3. Value:
54

Part 3: Without Calculating

4. Answer:
It is 3 times as large.

Part 4: Two Savings Plans

5. List the first 6 terms of each plan.
A: 0, 3, 6, 9, 12, 15; B: 0, 6, 12, 18, 24, 30

6. Write the ordered pairs (Plan A, Plan B).
(0, 0), (3, 6), (6, 12), (9, 18), (12, 24), (15, 30)

7. How does each Plan B amount compare with Plan A?
Each Plan B amount is 2 times the Plan A amount.

Part 5: Graph It

8. What do you notice about the points?
They line up in a straight path from (0, 0).

Extension

Week 4

{ [( )] }
2, 4, 6, 8…

Theme Park Points

Teacher Guide & Answer Keys

Grade 5 · All levels

Answer key · Advanced KEY

Part 1: Ride Points

1. Write an expression for your total points.
5 × (6 + 8)

2. Evaluate it.
70

Part 2: Bonus Points

3. Value:
106

Part 3: Without Calculating

4. Answer:
It is 5 times as large.

Part 4: Two Savings Plans

5. List the first 6 terms of each plan.
A: 0, 4, 8, 12, 16, 20; B: 0, 12, 24, 36, 48, 60

6. Write the ordered pairs (Plan A, Plan B).
(0, 0), (4, 12), (8, 24), (12, 36), (16, 48), (20, 60)

7. How does each Plan B amount compare with Plan A?
Each Plan B amount is 3 times the Plan A amount.

Part 5: Graph It

8. What do you notice about the points?
They line up in a straight path from (0, 0).

Extension

Week 2

{ [( )] }

2, 4, 6, 8…

Theme Park Points

Teacher Guide & Answer Keys

Grade 5 · All levels

Worked teacher example (Standard, Part 1)

Write an expression for your total points.

3 × (4 + 6)

Evaluate it.

30

Model the first part aloud: read the situation, name the operation, estimate, solve, and check. Then let partners try Part 2.

Look for

- Students use correct notation and units in every answer.
- Students explain why an answer is reasonable (estimates, benchmarks, pictures).
- Final products show the math clearly, not just the answers.