Supply Price Detectives

Track how availability can change cost.

GRADE 3 · TEKS 3.9.B

3.9.B "describe the relationship between the availability or scarcity of resources and how that impacts cost;"

NAME ____________________ DATE __________

COST AND AVAILABILITY

A resource is something people need or use. When a resource is scarce, its cost is often higher. When more is available, its cost can be lower, so subtract the lower cost from the higher to find the change.

WORKED EXAMPLE

A rack has only 3 hats left. Each hat costs $9. When many hats were available, each cost $6. How much more does a scarce hat cost?

1. Scarce cost: $9.
2. Available cost: $6.
3. Subtract: $9 - $6 = $3.

Answer: A scarce hat costs $3 more.

PRACTICE 6 problems

1 A garden center has many seed packets. One packet costs $2. After a dry season, packets are scarce and cost $7. How much more does a scarce packet cost?

ANSWER ____________________

2 When 12 soccer balls are available, each costs $10. When only 4 are left, each costs $14. What is the cost increase?

ANSWER ____________________

3 A store has plenty of comic books at $11 each. A shortage makes them cost $15 each. Which price shows scarcity, and how much higher is it?

ANSWER ____________________

4 A market has many jars of honey at $1 each. After most jars sell, the scarce jars cost $5 each. What is the difference in cost?

ANSWER ____________________

5 A craft shop's plentiful beads cost 25 cents per bag. Scarce beads cost 75 cents per bag. How much more do scarce beads cost?

ANSWER ____________________

6 A game shop has few puzzle books at $12 each. A new shipment arrives, and the price becomes $8 each. Does the new price show more availability or more scarcity? How much does the price change?

ANSWER ____________________

APPLY IT
Show your work

1 At a school trading day, there are 18 sports-card packs. Each pack costs \$2. Near the end, only 2 packs remain, and each costs \$7. How did scarcity affect the cost, and how much did the cost change?

WORK SPACE

ANSWER ______________________

2 A snack stand has 16 frozen fruit bars at \$5 each before recess. At the end of recess, only 4 remain, and each costs \$7. What does the new price tell you about availability, and how much more does each bar cost?

WORK SPACE

ANSWER ______________________

CHALLENGE
One step up

A shop starts with 28 notebooks at \$1 each. When only 2 notebooks remain, they cost \$8 each. A shipment brings 20 more notebooks, and the price becomes \$4 each. In two sentences, explain how availability affected cost and calculate both price changes.

WORK SPACE AND ANSWER

Supply Price Detectives

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A garden center has many seed packets. One packet costs $2. After a dry season, packets are scarce and cost $7. How much more does a scarce packet cost?	**$5 more**
2	When 12 soccer balls are available, each costs $10. When only 4 are left, each costs $14. What is the cost increase?	**$4**
3	A store has plenty of comic books at $11 each. A shortage makes them cost $15 each. Which price shows scarcity, and how much higher is it?	**$15 shows scarcity, and it is $4 higher.**
4	A market has many jars of honey at $1 each. After most jars sell, the scarce jars cost $5 each. What is the difference in cost?	**$4**
5	A craft shop's plentiful beads cost 25 cents per bag. Scarce beads cost 75 cents per bag. How much more do scarce beads cost?	**50 cents more**
6	A game shop has few puzzle books at $12 each. A new shipment arrives, and the price becomes $8 each. Does the new price show more availability or more scarcity? How much does the price change?	**More availability, and the price decreases by $4.**

PART 2 · APPLY IT

1. **Scarcity made the cost higher. The cost increased by $5.** Subtract $2 from $7 to find the change. The smaller number of packs is the scarce situation.
2. **The new price shows scarcity. Each bar costs $2 more.** The number of bars decreased from 16 to 4, so there are fewer available. Subtract $5 from $7.

CHALLENGE

When notebooks became scarce, the cost rose from $1 to $8, so it increased by $7. After the shipment, more notebooks were available and the cost fell from $8 to $4, so it decreased by $4.

Accept correct dollar signs or equivalent wording for price differences. For the challenge, accept any two-sentence explanation that connects scarcity to the higher price, greater availability to the lower price, and gives both changes correctly.