

Algebra I



STAAR Alternate 2

Administered April 2016

RELEASED

ALGEBRA I





Number of Bus Trips 	Cost 
1	\$4.00
2	\$8.00
3	

\$12.00

2a




Number of Bus Trips 	Cost 
1	\$4.00
2	\$8.00
3	\$12.00

2b

4	\$16.00
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5	\$16.00
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Buying Songs

Number of Songs 🎵	Cost 
4	\$12.00
5	\$15.00
7	\$21.00

3b

6	\$18.00
8	\$11.00

6	\$18.00
8	\$24.00

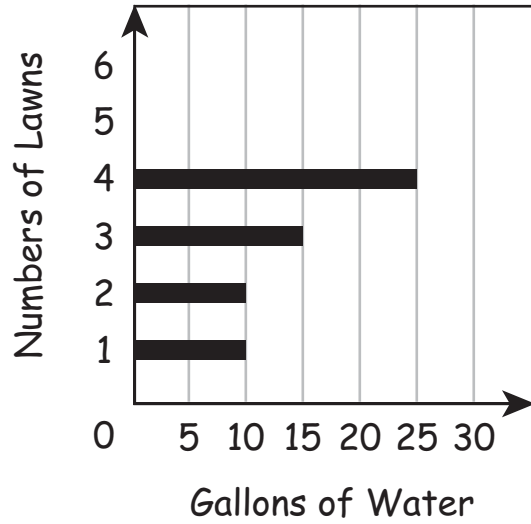
2	\$8.00
8	\$24.00

Lawn Watering

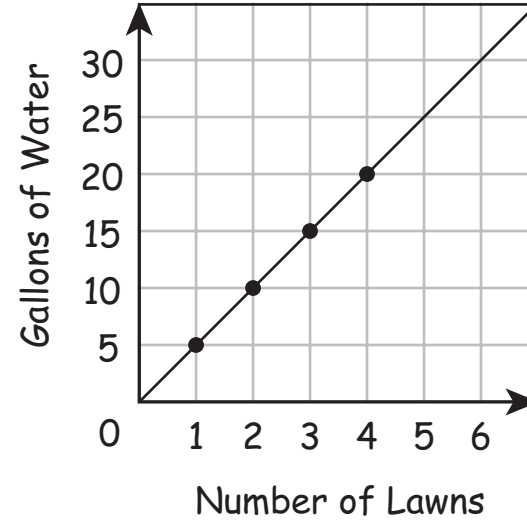
Number of Lawns	Gallons of Water
1	5
2	10
3	15
4	20

4b

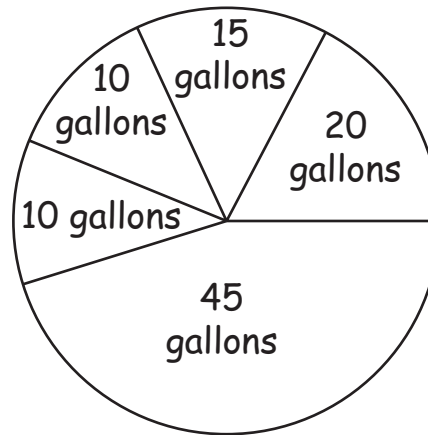
Lawn Watering



Lawn Watering



Lawn Watering



7

+

8


=

15



6a

7 + **8** = **15**



6 + **8** = **14**



6b

7	→	15
6	→	14

1	→	22
2	→	20

7a

$$2 \times 8 = 16$$

$$5 \times 8 = 40$$

$$8 \times 8 = 64$$

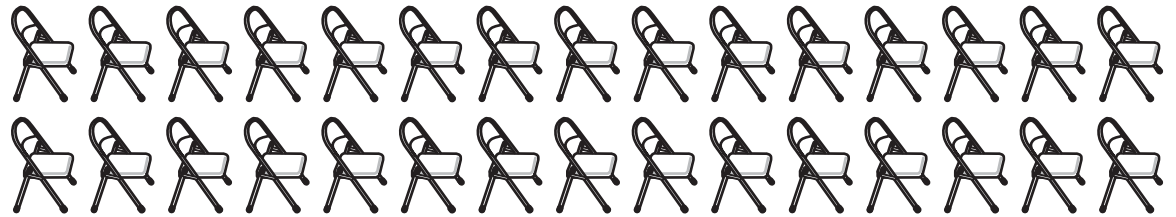
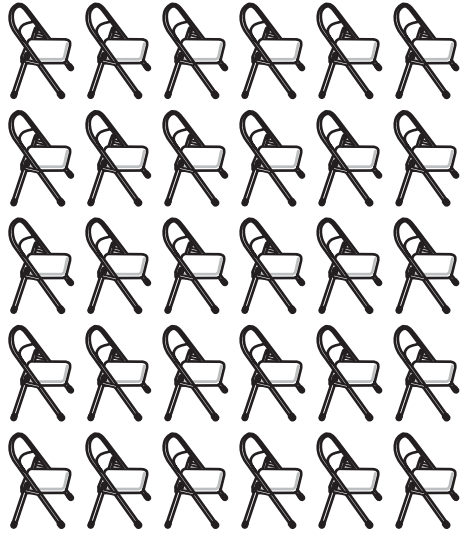
7b

$$10 \times 8 = 80$$

$$3 \times 8 = 24$$

$$11 \times 8 = 88$$

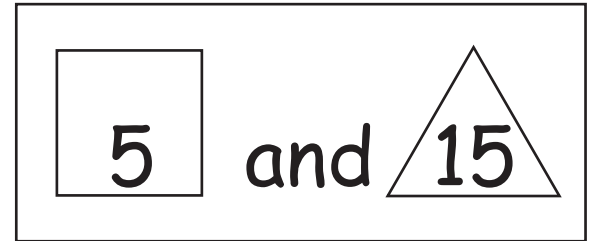
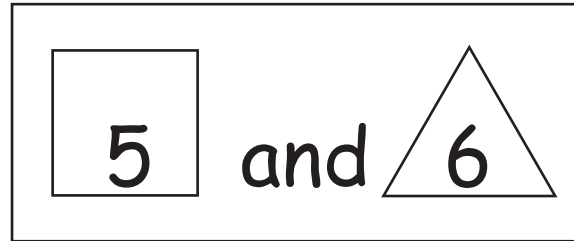
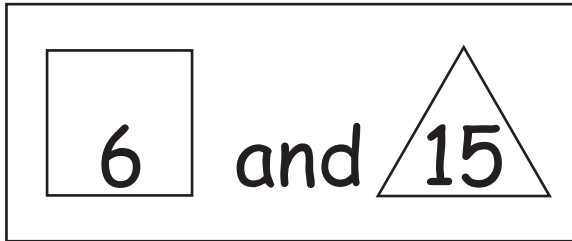
8a

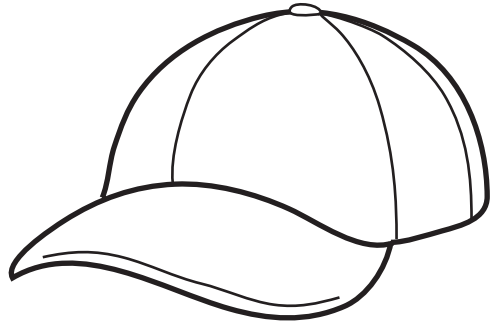


$$5 \times \square$$

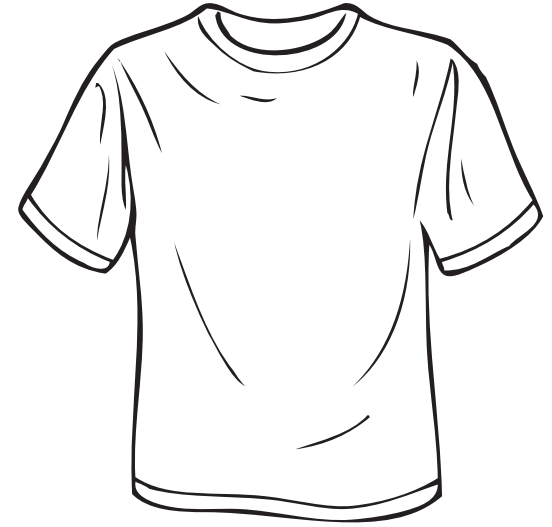
$$= 2 \times \triangle$$

8b



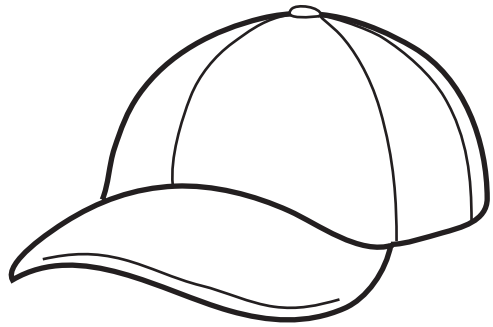


\$12.00

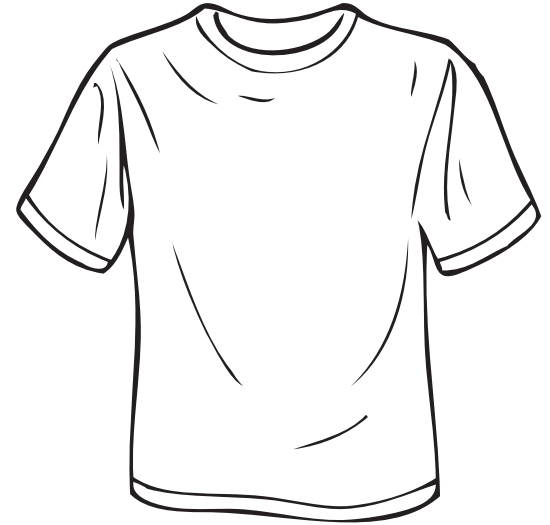


\$24.00

10a



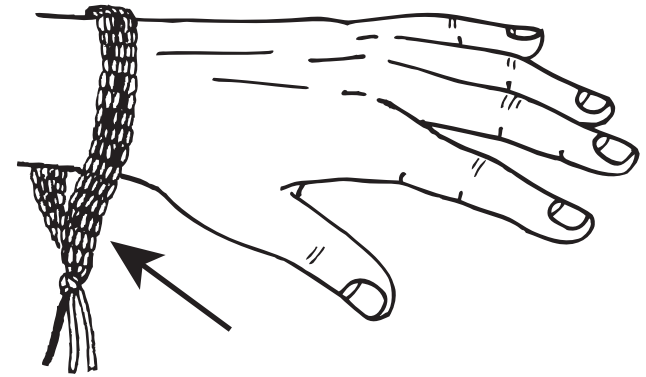
\$12.00



\$24.00



\$24.00



\$12.00

Buying a Cell Phone or DVDs



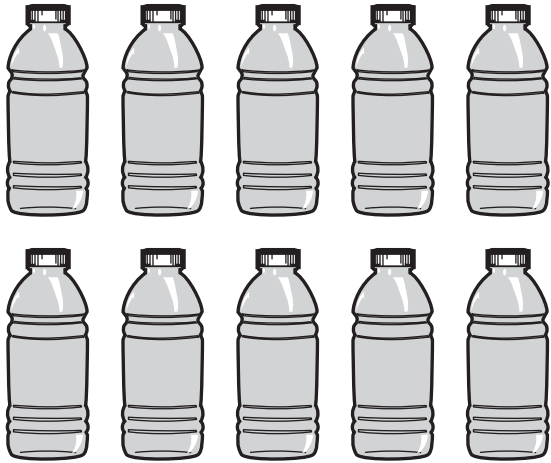
The student can buy —

more DVDs than cell phones,
because the cost of the cell phone is
10 times the cost of a DVD

more cell phones than DVDs,
because the cost of the DVDs is 10
times the cost of a cell phone


**the same number of cell phones as
DVDs,** because they both cost the
same amount

10-Pack



= \$20.00

5-Pack



= \$15.00

The 5-pack is a better deal, because each bottle costs \$3.00.

The 5-pack is a better deal, because \$15.00 is less than \$20.00.

The 10-pack is a better deal, because each bottle costs \$2.00.

2	2
2×2	4
$2 \times 2 \times 2$	8

14a

2	2
2×2	4
$2 \times 2 \times 2$	8

14b

2
$2 + 2$
$2 + 2 + 2$

2
2×2
$2 \times 2 \times 2$

15a

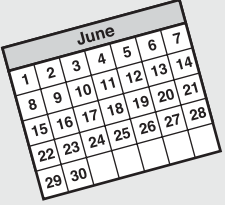
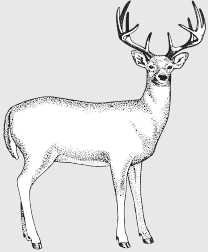
3	3
3×3	9
$3 \times 3 \times 3$	27

$3 \times 3 \times 3 \times 3 \times 3$	243
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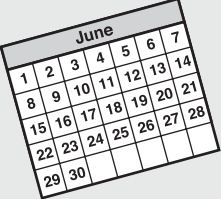
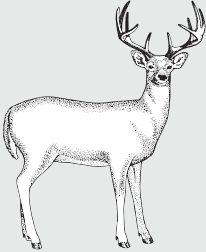
$3 \times 3 \times 3 \times 3$	81
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$3 + 3 + 3 + 3$	12
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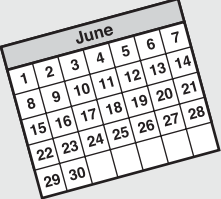
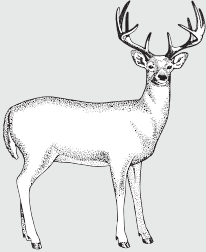
Deer Population

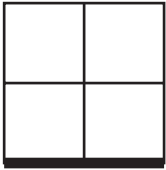
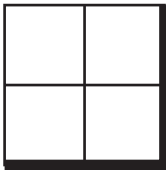
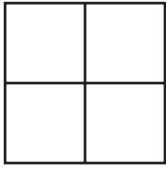
Number of Years 	Number of Deer 
1	2
2	4
3	8




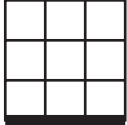
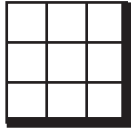
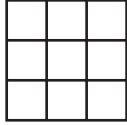
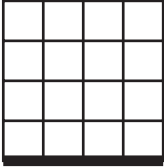

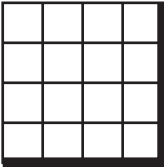
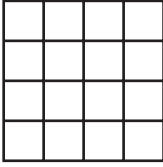
Deer Population

Number of Years 	Number of Deer 
1	3
2	9
3	27

Deer Population

Number of Years 	Number of Deer 
1	2
2	4
3	6

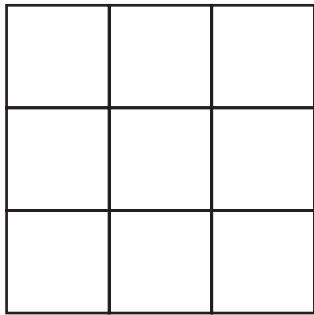
Side Length (feet)	→	Area (square feet)
 2	 2×2	 4

Side Length (feet)	→	Area (square feet)
 2	 2×2	 4
 3	 3×3	 9
 	 4×4	 16

18b

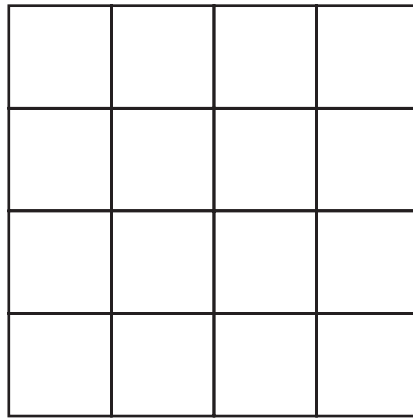


Area =
9 square feet



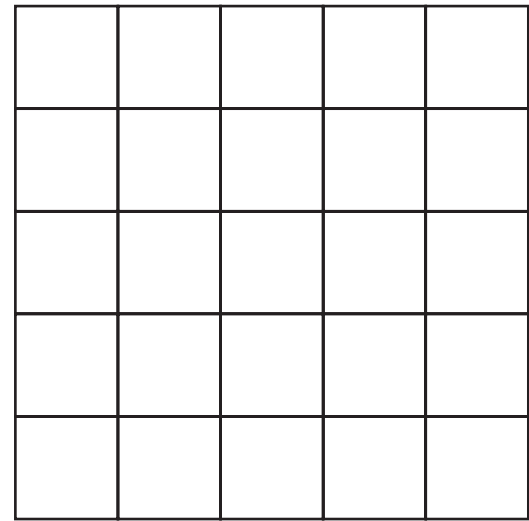
3 feet

Area =
16 square feet



4 feet

Area =
25 square feet



△ feet

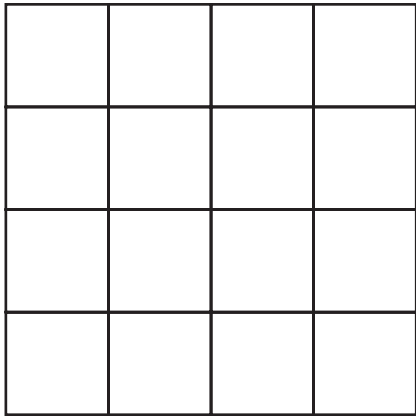
$$\triangle \times \triangle = 25$$

$$\triangle + \triangle = 25$$

$$\triangle - \triangle = 25$$

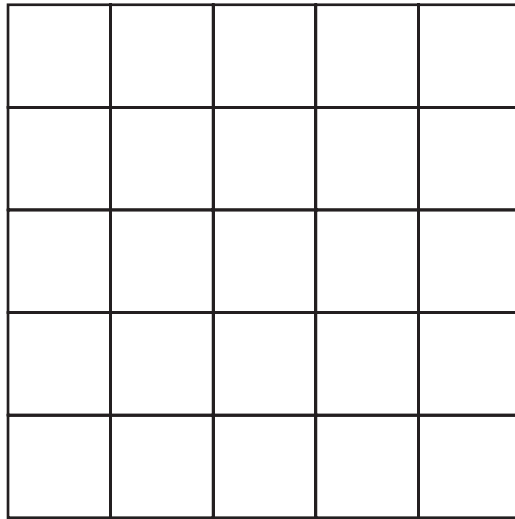
Area =

16 square feet



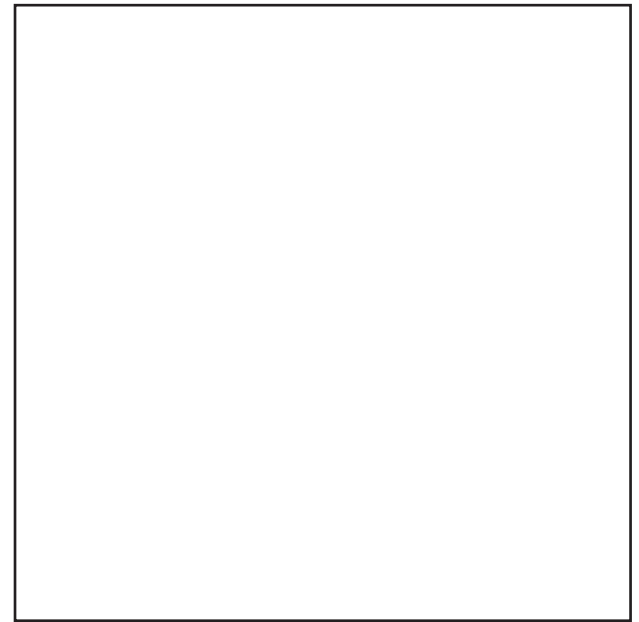
Area =

25 square feet



Area =

36 square feet



5 feet

6 feet

7 feet

STAAR ALTERNATE 2
Algebra I
April 2016