Multiplication Properties

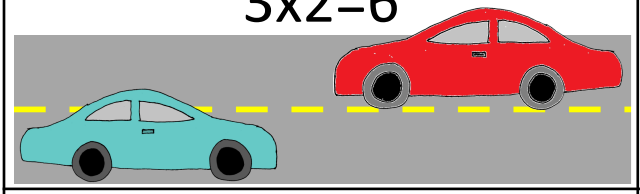
Teach Grow Sow

Commutative Property

The factors of a multiplication problem can be reversed and the answer will be the same.

2x3=6

3x2=6



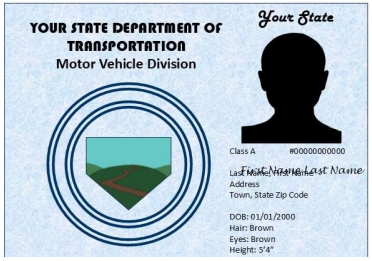
Identity Property

When multiplying one by any other factor, the other factor will be the product.

2x1=2

1x14=14

568x1=568



Associative Property

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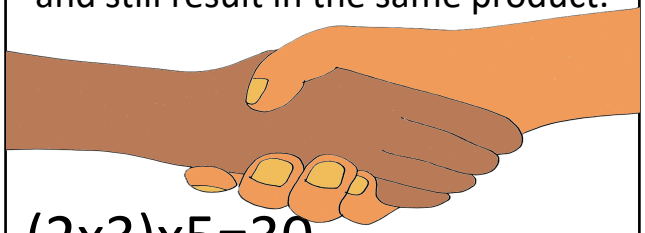


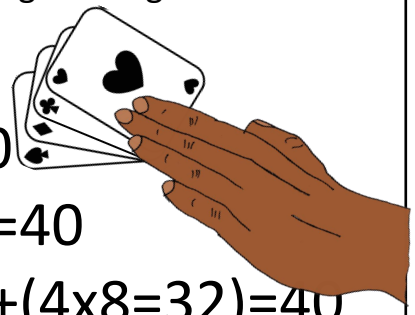
(2x3)x5=30

(5x3)x2=30

3x(2x5)=30

Distributive Property

Multiplying a number by a number that has been broken into smaller numbers results in the same product as multiplying the original number.



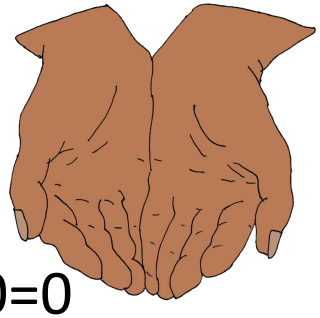
4x10=40

4x(2+8)=40

(4x2=8)+(4x8=32)=40

Zero Property

If one factor is zero, the product is zero.



5x0=0

0x47=0

674,193x0=0

Inverse Property

If a number is multiplied by its reciprocal, the answer is always one.

⅓x 3= 1

⅕ x 5=1

⅛ x 8=1

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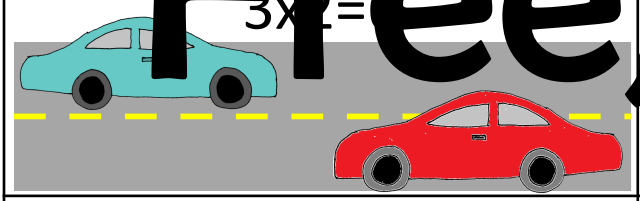

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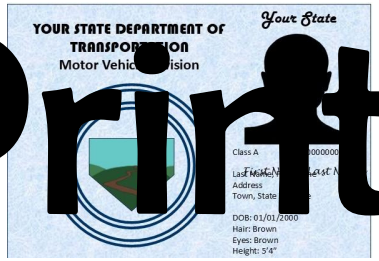

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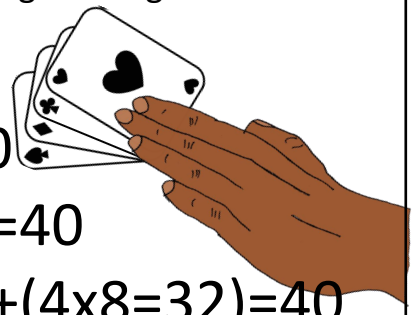

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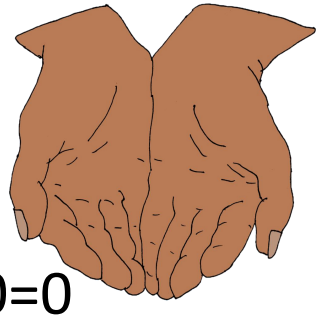

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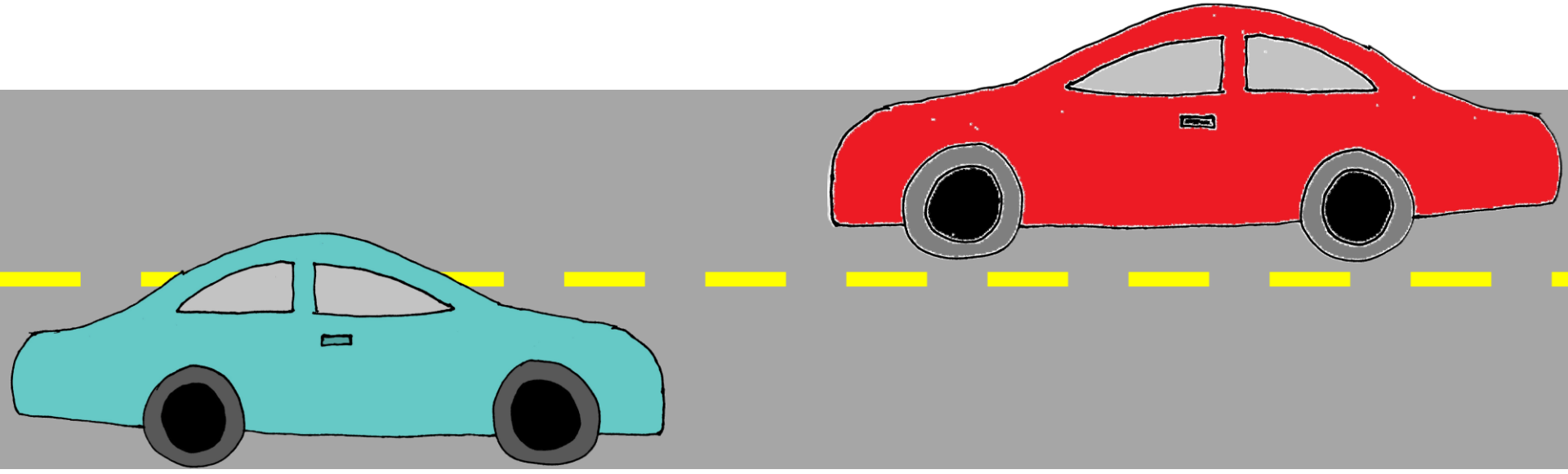

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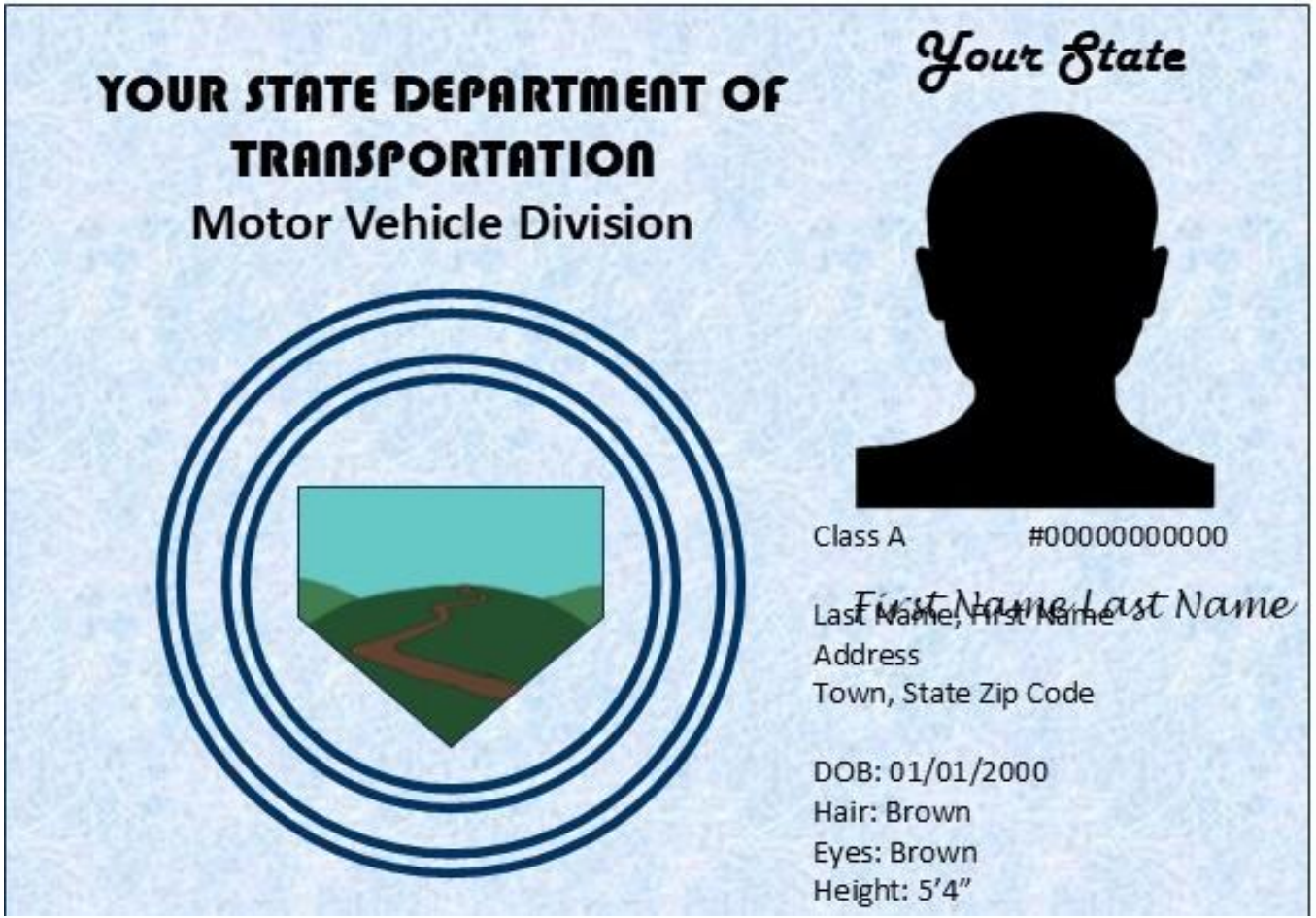

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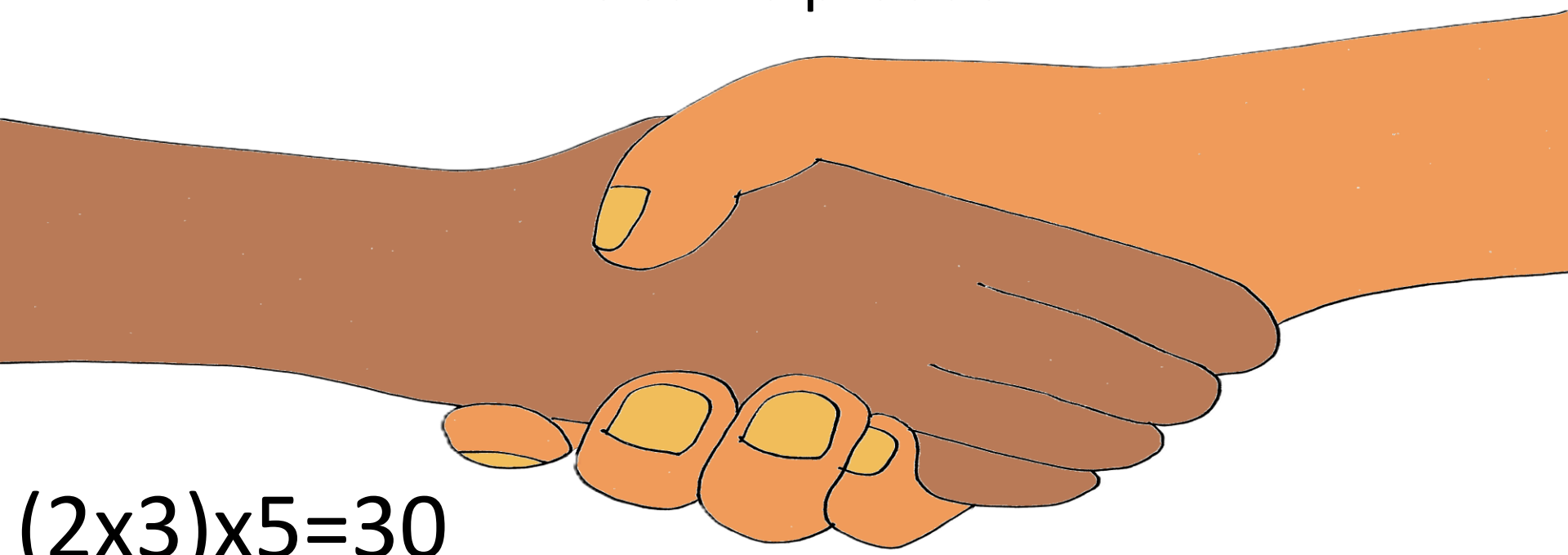

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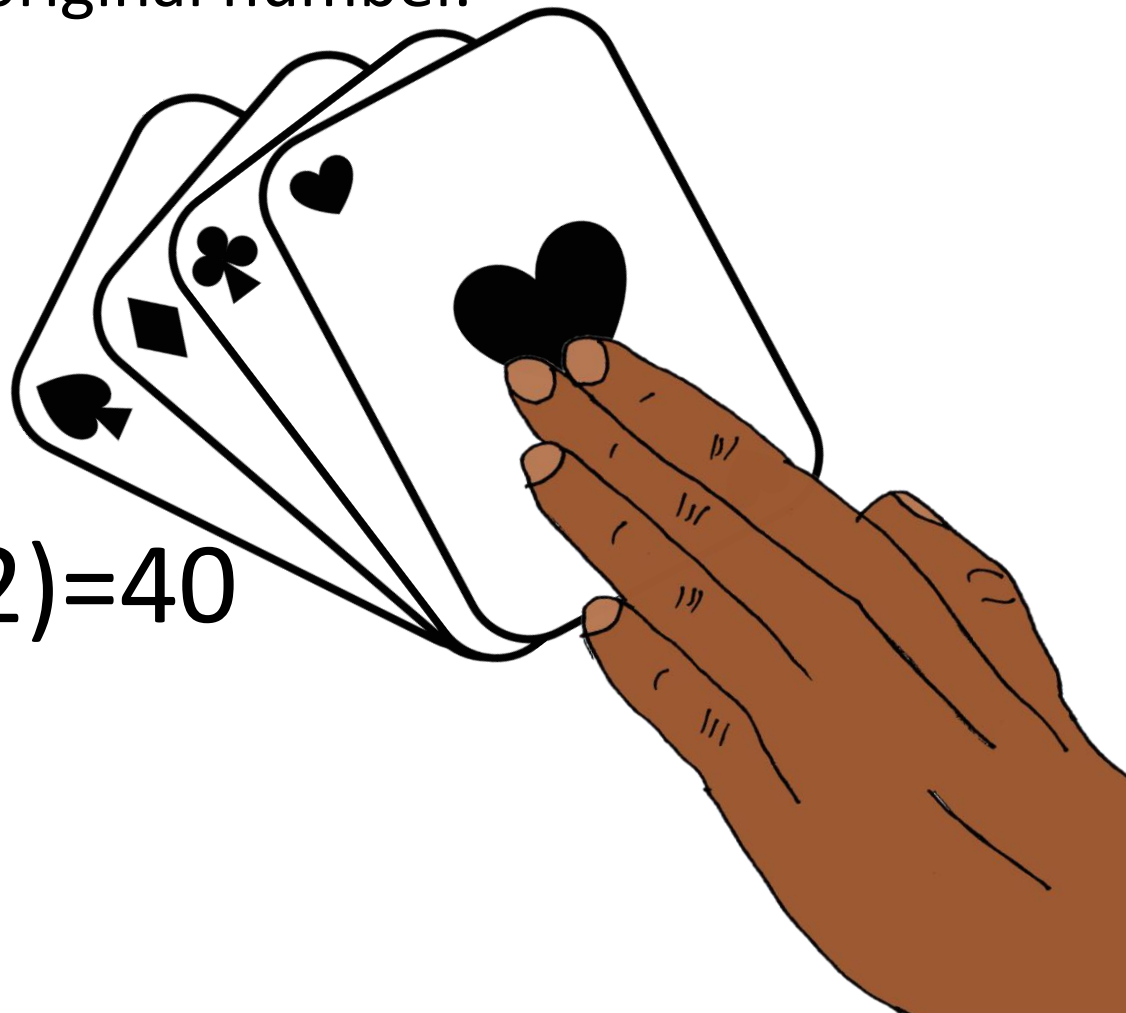

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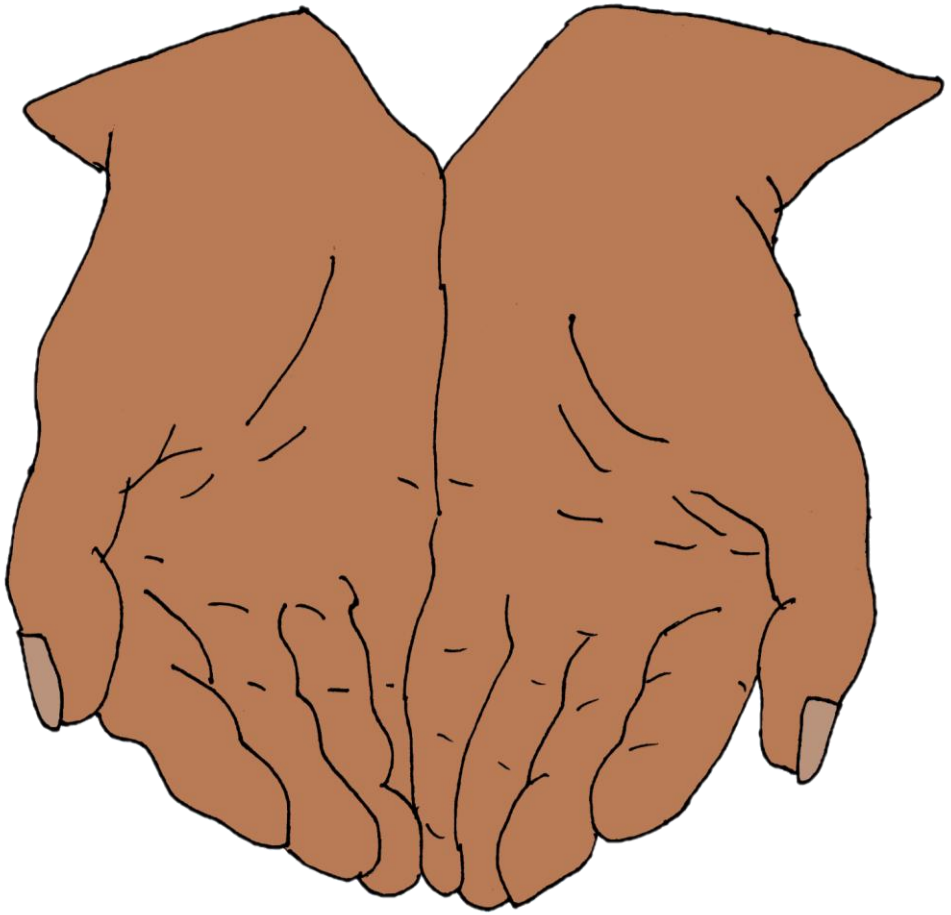

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If a number is multiplied by its reciprocal, the answer is always one.

$\frac{1}{3} \times 3 = 1$

$\frac{1}{5} \times 5 = 1$

$\frac{1}{8} \times 8 = 1$