Big Ideas Math®



Make My Team

▶ Materials:

- Trinomial cards
- Binomial cards
- Scrap paper
- Pencil
- Timer
- Score chart

Directions:

Students play as a group and then form different teams of three each round. Each student needs a score chart.

- Shuffle the two separate stacks of cards. One-third of the students choose a trinomial card and two-thirds of the students choose a binomial card. Students may look at their cards but should keep them face down.
- 2. On the count of three, the timer begins, and students flip their cards for others to see. Students with a trinomial card need to find the two binomial cards whose product equals the trinomial on their card. Students with a binomial card need to find the trinomial card for which their binomial is a factor and the second binomial card that is the other factor.
- 3. Once the teams are created and everyone in the team agrees, team members record the time on their score charts. **NOTE**: Some students may not have a match due to the shuffling of the cards and/or the number of students playing.
- 4. Students who do not have a match verify the products of each team. If the product is correct, a checkmark is written on each team member's score chart. If the product is incorrect, an X is written on each team member's score chart. **NOTE**: Students without a match do not write a time, checkmark, or X on their score chart for this round.
- 5. The matched cards are now discarded and unmatched cards are returned to the appropriate stacks.
- 6. Repeat steps 1-5 until time is up.
- 7. Students add their times for each round. Then, they add 30 seconds for each X and subtract five seconds for each checkmark. This answer is the final score.



► Who Wins?

The student with the lowest final score wins.

► Tips:

- The timer should be large and visible for all students.
- A time limit may need to be set for the formation of teams.

▶ Discuss:

Discuss whether it was easier to have a trinomial card or a binomial card.



Trinomial cards for Make My Team

		,
$x^2 - 5x - 50$	$x^2 - 12x + 32$	TRINOMIAL $x^2 - 5x - 24$
$x^2 + 5x - 14$	TRINOMIAL $x^2 + 2x - 3$	TRINOMIAL $x^2 + 5x + 4$
$x^2 + 7x - 30$	TRINOMIAL $x^2 + x - 132$	TRINOMIAL $2x^2 - 5x - 63$
TRINOMIAL $5x^2 - 31x + 6$	$7x^2 - 62x - 80$	$3x^2 + 11x - 42$
TRINOMIAL $15x^2 + 22x - 48$	$6x^2 + 11x - 72$	$3x^2 - 29x + 66$
TRINOMIAL $x^2 + 14x + 24$	TRINOMIAL $x^2 + 2x - 35$	TRINOMIAL $x^2 - 14x + 33$

TRINOMIAL $x^2 - 11x + 30$	$x^2 + 13x + 22$	TRINOMIAL $x^2 - 17x + 60$
TRINOMIAL $x^2 - 15x + 56$	$4x^2 + 19x - 30$	$3x^2 - 35x + 88$
$5x^2 + 46x - 40$	$2x^2 - 17x + 8$	TRINOMIAL $6x^2 + x - 40$
$4x^2 + 45x - 36$	$12x^2 + 19x - 18$	TRINOMIAL $3x^2 - 20x - 32$



(x+5)	BINOMIAL (x-10)	BINOMIAL (x - 8)
BINOMIAL (x-4)	BINOMIAL (x+3)	BINOMIAL (x-8)
BINOMIAL (x-2)	BINOMIAL $(x+7)$	BINOMIAL $(x+3)$
BINOMIAL (x-1)	BINOMIAL $(x+4)$	BINOMIAL $(x+1)$
BINOMIAL (x-3)	BINOMIAL $(x+10)$	BINOMIAL (x - 11)
BIVOMAL $(x + 12)$	BINOMIAL $(2x + 9)$	BINOMIAL (x-7)

BINOMIAL $(5x-1)$	BINOMIAL (x-6)	BINOMIAL $(7x + 8)$
BINOMIAL (x - 10)	BINOMIAL $(3x-7)$	BINOMIAL (x+6)
(3x - 11)	BINOMIAL (x-6)	BINOMIAL $(5x-6)$
BINOMIAL (3x + 8)	BINOMIAL $(2x + 9)$	BNOMAL $(3x - 8)$
BINOMIAL $(x + 12)$	BINOMIAL $(x+2)$	BNOMIAL $(x+7)$
BINOMIAL (x-5)	BINOMIAL (x-3)	BINOMIAL (x-11)

BINOMIAL (x-6)	BINOMIAL (x-5)	BINOMIAL $(x+2)$
BINOMIAL (x + 11)	BINOMIAL (x - 12)	BINOMIAL (x-5)
BINOMIAL (x - 8)	BINOMIAL (x-7)	BINOMIAL $(4x-5)$
BINOMIAL (x+6)	BINOMIAL $(3x + 4)$	BINOMIAL (x - 8)
BINOMIAL (x - 8)	BINOMIAL $(3x-11)$	BINOMIAL $(5x-4)$
BINOMIAL (x + 10)	BINOMIAL (2x - 1)	BINOMIAL (x - 8)

BINOMIAL	BINOMIAL	BINOMIAL
(3x+8)	(2x-5)	(4x-3)
BINOMIAL	BINOMIAL	BINOMIAL
(x+12)	(3x-2)	(4x+9)

Round #	Time (in seconds)	☑ or 🗷
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		



Answers for Make My Team

$$x^{2} - 5x - 50 = (x + 5)(x - 10)$$

$$x^{2} + 14x + 24 = (x + 12)(x + 2)$$

$$x^{2} - 12x + 32 = (x - 8)(x - 4)$$

$$x^{2} + 2x - 35 = (x + 7)(x - 5)$$

$$x^{2} - 5x - 24 = (x + 3)(x - 8)$$

$$x^{2} - 14x + 33 = (x - 3)(x - 11)$$

$$x^{2} + 5x - 14 = (x - 2)(x + 7)$$

$$x^{2} + 2x - 3 = (x + 3)(x - 1)$$

$$x^{2} + 5x + 4 = (x + 4)(x + 1)$$

$$x^{2} + 5x + 4 = (x + 4)(x + 1)$$

$$x^{2} + 7x - 30 = (x - 3)(x + 10)$$

$$x^{2} + x - 132 = (x - 11)(x + 12)$$

$$2x^{2} - 5x - 63 = (2x + 9)(x - 7)$$

$$5x^{2} - 31x + 6 = (5x - 1)(x - 6)$$

$$7x^{2} - 62x - 80 = (7x + 8)(x - 10)$$

$$3x^{2} + 11x - 42 = (3x - 7)(x + 6)$$

$$3x^{2} - 29x + 66 = (3x - 11)(x - 6)$$

$$15x^{2} + 22x - 48 = (5x - 6)(3x + 8)$$

$$4x^{2} + 19x - 18 = (3x - 2)(4x + 9)$$

