## Quadratic Factoring (Basic) "I have. Who has." Game:

The cards can be used in a lot of ways but with a small group you can try this.
The cards are given out evenly to all players.
It will be easier if the students group the cards in their hand according to the answers $f(0)=$ etc (The "I have" part of the card)

Player one puts a card down, face up on the table and/or reads out the question.

| Example card. | Response |
| :--- | :--- |
| I have <br> $(x+4)(x+3)$ <br> who has <br> $x^{2}+9 x+18$ | The question part of the card is <br> who has <br> $x^{2}+9 x+18$ <br> All students do the question and look for the answer on their "I have." cards |

The student who has the correct answer puts his card down, says what the correct answer is. If all students agree with the answer, that student then reads out the question on the card they just put down.
If that student didn't have the correct answer they take their card back and the student with the correct answer puts their card down.

Correct answer card.
I have
$(x+6)(x+3)$

Who has
The next question then becomes;

$$
x^{2}+2 x-24
$$



Play then continues but at some point the correct answer won't be on any of the cards because it was on the first card that was put down.

In that case the last person who played puts down another card.
The player who gets rid of all their cards first is the winner.

If students are using these for review at home, without cutting them into cards, they will find that the answer to each question is on the following card.



| I have |
| :---: |
| $(x-9)(x+4)$ |
| Who has |
| $x^{2}-20 x+36$ |


| I have |
| :---: |
| $(x-18)(x-2)$ |
| Who has |
| $x^{2}+7 x-18$ |

I have
$(x+9)(x-2)$
Who has
$x^{2}+35 x-36$

| I have |
| :---: |
| $(x+36)(x-1)$ |
| Who has |
| $x^{2}+8 x-20$ |

I have
$(x+10)(x-2)$
Who has
$x^{2}+25 x+24$

| I have |
| :---: |
| $(x+24)(x+1)$ |
| Who has |
| $x^{2}-x-20$ |

I have
$(x-5)(x+4)$
Who has
$x^{2}+5 x-24$

