*** Function returns either a 0 (false) or non-zero (true) ***
1. Find a single input which produces a non-zero output.
2. Produce a concise and exact description of the set of inputs producing a non-zero output.
3. Find an algorithm that generates some inputs which will produce non-zero output.
4. Find an algorithm that generates all inputs that will produce non-zero output

```
int check1(int a)
{
        a = a / 2 * 3;
        if (a > 5 && a < 17)
        {
                return 1;
        } else {
                return 0;
        }
}
```

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```
int check2(int a)
{
        if (((a / 2) * 2) != a && a < 24)
        {
                return 1;
        } else {
                return 0;
        }
}
```

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```
int check3(int a)
{
        return a - 2;
}
```

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```
int check4(unsigned int a)
{
        int r = a - (a / 3) * 3;
        if (r == 2)
        {
                return a / 17;
        } else if (r == 1)
        {
                if (a > 5 && a < 15)
                {
                        return 0;
                }
        } else {
                return 0;
        }

        return 1;
}
```

*** Function returns either a 0 (false) or non-zero (true) ***
1. Find a single input which produces a non-zero output.
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```
int check5(int a, int b, int c)
{
        if (a == 0 || b == 0 || c == 0)
        {
                return 0;
        }

        if (a * a + b * b == c * c)
        {
                return 1;
        } else {
                return 0;
        }
}
```