At Home With Inequalities

Show all work to solve each inequality. Select the correct answer choice and draw the picture on the house page.

1. $n + 5 \geq 32$ a) $n \leq 27$ draw smoke coming out of the chimney
                                       b) $n \geq 27$ draw a pumpkin in the window on the left
                                       c) $n \geq 37$ draw a smiley face on the door knob

2. $v - 8 \leq 35$ a) $v \leq 27$ draw a tree in the yard
                                       b) $v \geq 27$ draw a person looking out of the window in the door
                                       c) $v \leq 43$ draw a cat on the porch

3. $r - 6 < -15$ a) $r < 9$ draw a mouse on the porch
                                       b) $r < -9$ draw a ghost coming out of the chimney
                                       c) $r < 21$ draw a "Help Wanted" sign on the door

4. $-81 > 16 + q$ a) $q < 65$ draw snowflakes in the sky
                                       b) $q > -97$ draw stars in the sky
                                       c) $q < -97$ draw a bat in the sky

5. $-51 \leq x - (-38)$ a) $x \geq -89$ draw a tombstone in the yard
                                       b) $x \leq -89$ draw 2 flowers in the yard
                                       c) $x \geq 89$ draw 3 flowers in the yard

6. $m - (-3.4) \geq 12.7$ a) $m \geq -9.3$ draw a pig flying in the sky
                                       b) $m \leq -9.3$ draw a spaceship
                                       c) $m \geq 9.3$ draw a moon in the sky

7. $4.2 > -11 + t$ a) $t < 15.2$ draw a bat hanging from the house
                                       b) $t < 53$ draw a bird on the roof
                                       c) $15.2 < t$ draw a tree in the yard

8. $2\ell < \ell - 6$ a) $\ell < 6$ draw Christmas lights in the house
                                       b) $\ell < -6$ draw a spider web in one of the windows
                                       c) $\ell > -6$ draw a bee net to a bee hive

9. $16w \geq 15w - 8$ a) $w \geq 8$ draw a car on the side of the house
                                       b) $w \leq -8$ draw a swing on the porch
                                       c) $w \geq -8$ draw a pumpkin on the bottom step of the porch

10. $6p > 5p + 19$ a) $p < 19$ draw a pool in the yard
                                       b) $p > 19$ put a spider in the web in the window
                                       c) $p < -19$ put a pot of flowers on the porch

11. $u - 12 < 2u$

    a) $u > -12$ draw a "Trick or Treat" sack on the top step
    b) $u > 12$ draw a garden in the yard
    c) $u < 12$ draw children playing in the yard

12. $2y - 17 \geq y - 6$

    a) $y \geq 23$ draw a turkey in the yard
    b) $y \geq -23$ put a sign in the window that says "Closed"
    c) $y \geq 11$ draw scary eyes in one of the windows

13. $3e - 0.2 \geq 4e + 0.5$

    a) $e \leq -0.7$ draw a ghost peeking around the side of the house
    b) $e \leq 7$ draw a dog in the yard
    c) $e \geq -7$ draw fire coming out of the chimney

14. $-3 + 12a < -4 + 11a$

    a) $a < 1$ put a stack of logs on the porch
    b) $a < -1$ draw a spider hanging from the door knob
    c) $a < 7$ draw a Christmas tree in the window

15. $-11.4 + s > 2s - 6.5$

    a) $s < -4.9$ draw a mummy sitting on the roof
    b) $s < 4.9$ draw a toy on the porch
    c) $s > 49$ draw a bike in the yard

16. $2.1k - 4 \geq 3.1k + 4$

    a) $k \leq -8$ draw a wilted flower in the yard
    b) $k \leq 0$ draw bricks on the chimney
    c) $k \leq 8$ draw rocks on the chimney

17. $-\dfrac{3}{10} + d < \dfrac{9}{10}$

    a) $d < 3/5$ draw a heart on the door

    b) $d < 6/5$ draw a witch flying in front of the moon
    c) $d < 2/5$ draw a butterfly near the chimney

18. $\dfrac{3}{4}c \leq \dfrac{7}{4}c - 1$

    a) $c \geq 1$ create your own Halloween character

    b) $c \leq 1$ draw a sun in the sky
    c) $c \geq 11/4$ draw clouds in the sky

19. A number decreased by 10 is greater than -5.

    a) $n > 15$ draw a man in the yard with one leg

    b) $n < 15$ draw a bear sitting on the roof
    c) $n > 5$ draw Frankenstein in the yard

20. A number increased by 2 is at most 6.

    a) $n \leq 4$ draw a sign on the door that says "Haunted House"
    b) $n \leq 8$ draw a helicopter in the sky
    c) $n \leq -4$ draw a sign on the door that says "Hi, Mom!"