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You have an equally likely chance of choosing any integer from 1 through 80 . Find the probability of the given event. Express your probabilities as simplified fractions.
1.) An odd number is chosen. 2.) A number greater than 50 is chosen.
3.) A perfect square is chosen.
4.) A perfect cube is chosen.
5.) A multiple of 3 is chosen.
6.) A factor of 200 is chosen.
7.) An even number greater than 30 is chosen.

A card is randomly drawn from a standard deck of 52 cards. Find the probability of drawing the given card. Express your probabilities as simplified fractions.
9.) The king of diamonds
11.) A spade
13.) A card other than a 2
14.) A face card (a king, queen, or jack)

You are rolling a $\mathbf{2 0}$-sided die where the sides are numbered 1 through 20. Find the indicated odds.
15.) In favor or rolling a 10
17.) Against rolling a 1,3 , or 5
18.) Against rolling a number greater than 13
19.) In favor of rolling an even number less than 10 .
20.) Against rolling an odd number greater than 10.

Find the probability that a dart thrown at the square target will hit the given region. Assume the dart is equally likely to hit any point inside the target. Round your answer to three decimal places.
21.) The center $a$
22.) The border $f$

24 in.

23.) The center $a$ or the ring $b$
24.) The four rings ( $b, c, d$, and $e$ ) or the center
25.) The ring $d$ or $e$.
26.) Six band members of different heights are going to march single file in a parade. The order in which they march is to be randomly selected. What is the probability that they will march in order of height from shortest to tallest? Round your answer to six decimal places.

