



## Two-step inequalities - fractions - very hard

Solve an inequality:

$$1) -53p + 22\frac{19}{34} \geq -5\frac{4475}{5134}$$

$$2) 33\frac{61}{93}m - \frac{1}{56} \geq 6\frac{9811}{26040}$$

$$3) 34\frac{23}{36}x + 22\frac{1}{2} > 3469\frac{961}{4860}$$

$$4) \frac{7}{12} + \frac{3}{2}r < -2\frac{1}{3}$$

$$5) \frac{99}{80} + 42\frac{25}{86}m \leq 1613\frac{94703}{134160}$$

$$6) 22\frac{6}{23}n + 22\frac{27}{98} < 61\frac{185609}{421498}$$

$$7) \frac{44}{29}x - \frac{37}{25} \leq -303\frac{2126}{2175}$$

$$8) \frac{1}{42} - \frac{28}{19}n > -142\frac{1399}{2394}$$

$$9) -\frac{104}{93} + 14\frac{7}{24}x > -3\frac{119}{744}$$

$$10) \frac{18}{13}b + 9\frac{55}{57} \geq 9\frac{803}{43719}$$

$$11) \frac{14}{11} - \frac{11}{42}x \leq -4\frac{4586}{5005}$$

$$12) \frac{32}{39} + 1\frac{23}{54}k \leq -\frac{4909}{16848}$$

$$13) 41\frac{4}{11}a + 30\frac{19}{24} < 69\frac{2317}{7656}$$

$$14) \frac{40}{41} - \frac{5}{7}v \leq 7\frac{8284}{8323}$$

15)  $23\frac{3293}{5928} < \frac{5}{3}p + 22\frac{29}{52}$

16)  $-\frac{3}{4}x + 29\frac{55}{68} < 30\frac{19}{34}$

17)  $-61\frac{37}{52} > 3\frac{21}{26}m - 56$

18)  $64\frac{829}{1680} > \frac{71}{90}n - \frac{1}{8}$

19)  $20 + \frac{93}{47}r \geq 100\frac{67}{91}$

20)  $8\frac{7}{25} + 13\frac{11}{48}n > -653\frac{107}{600}$

21)  $31\frac{30103}{42757} \geq 31\frac{2}{13}x + 48\frac{1}{23}$

22)  $7\frac{757}{4450} \leq 32\frac{13}{50} - \frac{22}{39}b$

23)  $26\frac{1027}{3059} \geq -\frac{1}{9}n + 26\frac{37}{69}$

24)  $-\frac{85}{64} + 19\frac{20}{41}v \geq -17\frac{54723}{81344}$

25)  $47\frac{13}{16} - \frac{1}{3}x < 41\frac{125}{656}$

26)  $2 - \frac{130}{97}a \leq -15\frac{779}{873}$

27)  $42\frac{85}{87}k + \frac{34}{27} < -103\frac{595}{132327}$

28)  $7\frac{26}{57}x + 22\frac{16}{81} \leq 31\frac{4621}{10773}$

29)  $\frac{85}{99} + \frac{117}{100}x < -\frac{56839}{79200}$

30)  $-12\frac{2275}{3249} \leq 4\frac{1}{57}n - 1$

## Two-step inequalities - fractions - very hard

Solve an inequality:

$$1) -53p + 22\frac{19}{34} \geq -5\frac{4475}{5134}$$

$$p \leq \frac{81}{151}$$

$$2) 33\frac{61}{93}m - \frac{1}{56} \geq 6\frac{9811}{26040}$$

$$m \geq \frac{19}{100}$$

$$3) 34\frac{23}{36}x + 22\frac{1}{2} > 3469\frac{961}{4860}$$

$$x > 99\frac{68}{135}$$

$$4) \frac{7}{12} + \frac{3}{2}r < -2\frac{1}{3}$$

$$r < -1\frac{17}{18}$$

$$5) \frac{99}{80} + 42\frac{25}{86}m \leq 1613\frac{94703}{134160}$$

$$m \leq 38\frac{5}{39}$$

$$6) 22\frac{6}{23}n + 22\frac{27}{98} < 61\frac{185609}{421498}$$

$$n < 1\frac{142}{187}$$

$$7) \frac{44}{29}x - \frac{37}{25} \leq -303\frac{2126}{2175}$$

$$x \leq -199\frac{28}{75}$$

$$8) \frac{1}{42} - \frac{28}{19}n > -142\frac{1399}{2394}$$

$$n < 96\frac{97}{126}$$

$$9) -\frac{104}{93} + 14\frac{7}{24}x > -3\frac{119}{744}$$

$$x > -\frac{1}{7}$$

$$10) \frac{18}{13}b + 9\frac{55}{57} \geq 9\frac{803}{43719}$$

$$b \geq -\frac{121}{177}$$

$$11) \frac{14}{11} - \frac{11}{42}x \leq -4\frac{4586}{5005}$$

$$x \geq 23\frac{41}{65}$$

$$12) \frac{32}{39} + 1\frac{23}{54}k \leq -\frac{4909}{16848}$$

$$k \leq -\frac{131}{168}$$

$$13) 41\frac{4}{11}a + 30\frac{19}{24} < 69\frac{2317}{7656}$$

$$a < \frac{27}{29}$$

$$14) \frac{40}{41} - \frac{5}{7}v \leq 7\frac{8284}{8323}$$

$$v \geq -9\frac{24}{29}$$

$$15) 23 \frac{3293}{5928} < \frac{5}{3}p + 22 \frac{29}{52}$$

$$p > \frac{91}{152}$$

$$16) -\frac{3}{4}x + 29 \frac{55}{68} < 30 \frac{19}{34}$$

$$x > -1$$

$$17) -61 \frac{37}{52} > 3 \frac{21}{26}m - 56$$

$$m < -1 \frac{1}{2}$$

$$18) 64 \frac{829}{1680} > \frac{71}{90}n - \frac{1}{8}$$

$$n < 81 \frac{51}{56}$$

$$19) 20 + \frac{93}{47}r \geq 100 \frac{67}{91}$$

$$r \geq 40 \frac{73}{91}$$

$$20) 8 \frac{7}{25} + 13 \frac{11}{48}n > -653 \frac{107}{600}$$

$$n > -50$$

$$21) 31 \frac{30103}{42757} \geq 31 \frac{2}{13}x + 48 \frac{1}{23}$$

$$x \leq -\frac{75}{143}$$

$$22) 7 \frac{757}{4450} \leq 32 \frac{13}{50} - \frac{22}{39}b$$

$$b \leq 44 \frac{85}{178}$$

$$23) 26 \frac{1027}{3059} \geq -\frac{1}{9}n + 26 \frac{37}{69}$$

$$n \geq 1 \frac{107}{133}$$

$$24) -\frac{85}{64} + 19 \frac{20}{41}v \geq -17 \frac{54723}{81344}$$

$$v \geq -\frac{26}{31}$$

$$25) 47 \frac{13}{16} - \frac{1}{3}x < 41 \frac{125}{656}$$

$$x > 19 \frac{71}{82}$$

$$26) 2 - \frac{130}{97}a \leq -15 \frac{779}{873}$$

$$a \geq 13 \frac{41}{117}$$

$$27) 42 \frac{85}{87}k + \frac{34}{27} < -103 \frac{595}{132327}$$

$$k < -2 \frac{72}{169}$$

$$28) 7 \frac{26}{57}x + 22 \frac{16}{81} \leq 31 \frac{4621}{10773}$$

$$x \leq 1 \frac{5}{21}$$

$$29) \frac{85}{99} + \frac{117}{100}x < -\frac{56839}{79200}$$

$$x < -1 \frac{25}{72}$$

$$30) -12 \frac{2275}{3249} \leq 4 \frac{1}{57}n - 1$$

$$n \geq -2 \frac{52}{57}$$