	BASIC RESPONSES	
Jump raises - minors limit	□ forcing □ other Pre-emptive	
Jump raises - majors limit	forcing other Pre-emptive	
Jump shifts after minor openir	ng Strong (good suit and/or fit for partner is usual)	Names: John Wilson
Jump shifts after major openir	ng Strong (good suit and/or fit for partner is usual)	
Responses to strong 2 suit op	Next suit is negative (< 1.5 HT) OR no 5 card suit	
Responses to 2NT opening	3 <b>≙</b> Puppet Stayman; 3♦ Flint; 3♥3♠natural & forcing	Basic System: Acol Classification: Green
F	PLAY CONVENTIONS	Classification. Green
'NT' Versus Notrump	'S' Versus Suit V= Both	 Describe strength, minimu
Sequence leads:	Overlead all All except AK x (x)	] 1♠ (3) 4, 11+ 1
Underlead	other Highest or 3rd highest (0 or 2 higher)	<b>1 NT</b> 12-14 (May be 17
Four or more with an honour	4th highest 🗹 attitude 🗔	2. Stayman: simple
3rd/5th	other	transfers 2♦ to 2♥
From 4 small 2nd high	est 🗹 other	2 NT Transfer to 3
From 3 cards (no honour)	top 🗔 middle 🗹 bottom 🗔	2 23+ balanced OR 8
Signal on partner's lead:	high encourage 🗹 low encourage 🗔	2 25+ balanced OR G
other count;	; suit preference as need arises	2♥ 6 card ♥suit, 6 to 10
Signal on declarer's lead	count (when needed); may be attitude or suit preference	2 <b>▲</b> 6 card <b>▲</b> suit, 6 to 10
Discards McKenney	high encourage 🗹 low encourage 🗌	2 NT 20-22 balanced
odd/even	other count; suit preference as need arises	3 NT long minor, at bes
Count natural	reverse	PRE-ALERT
	CONVENTIONS	MEANIN
4NT: Blackwood	RKCB other (Modified Blackwood)	Comic 1NT/Roman Jumps
	when? Over 1 NT opening; and 2NT opening equivalent	
	Other Conventions	
Splinters		
Long suit trial bids		Negative doubles through
Cue raises in all positions		Jump overcalls Pre-er
Good-Bad 2NT		1NT overcall (immediate)
		Immed cue of minor
		Immed cue of major
	©ABF Marketing PO Box 397	Over opponent's 1NT (we
	Fyshwick ACT 2609	Over opponent's 1NT (stro
	Tel: 02 6239 2265	

FAX: 02 6239 1816

#### INCORPORATED © STANDARD SYSTEM CARD David Smyth on 160458 Blue Red 🛛 Yellow 🗆 **OPENING BIDS** Canape num length, or specific meaning 1 4, 11+ 1♥ 4, 11+ 1♠ 4, 11+ may contain 5 card major 11.5 fav, 15 unfav) $\Box$ le 🗹 extended other 2♠ to 3♠ 2♥ to 2♠ other 2NT transfer to 3♦ 3♦ 8 to 9.5 playing tricks in unspecified suit Game Force. 10 points. 10 points. est 1 K outside **IS: CALLS THAT MAY HAVE UNEXPECTED IG/S OR REQUIRE SPECIAL DEFENCE** ps o'calls v.strong 1€ **COMPETITIVE BIDDING** 2♠ 4♦ Responsive doubles through h Over m, M + m; Over M, minors emptive Unusual NT 15-19, stop (re-opening) 10-14, stop not needed 5/5 Majors 5/5 other Major/minor 2&Landy (takeout for the majors) eak) 2. Landy (takeout for the majors) rong) FODU (Fishbein (next suit) over; double under) Over weak twos Over opening threes FODU

AUSTRALIAN BRIDGE FEDERATION

Copyright © BCC 6.3.17

		RESPONSES TO (				
		Describe strength, minimum lengt	th or spe	cific meaning	Ac	ditiona
1 <b>≜</b>	1♦	6+ points, 4+ cards	2NT	support-limit raise OR 16+		3∉
	1♥♠	6+ points, 4+ cards	3♠	pre-emptive raise		37
	1NT	6-9 points, no major	3	splinter (10-14 pts, 0 or 1 🔶		4
	2♠	5-9 points, 4+ support	3♥	splinter (10-14 pts, 0 or 1 🂙		4♦
	2♦	Strong-usually fit &/or good su		splinter (10-14 pts, 0 or 1 🔿		4♥
	2♥	Strong-usually fit &/or good su		13-15, balanced, support		4♠
	2♠	Strong-usually fit &/or good su	uit4 bids	Cue, sets suit (4 <b>≜</b> as 1♦4♦)	Ur	nusual
1♦	1♥♠	5+ points, 4+ cards	3♣	Strong- fit &/or good suit		oth
	1NT	6-9 points, no major	3♦	pre-emptive raise		
	2♠	10+ points, 3+ cards	3♥	splinter (10-14 pts, 0 or 1 🍤	Ot	her sla
	2♦	5-9 points, 4+ support	3♠	splinter (10-14 pts, 0 or 1 会	4tl	h Suit I
	2♥	Strong- fit &/or good suit	3NT	13-15, balanced, support	N	Chec
	2♠	Strong- fit &/or good suit	4♦	Sets suit, slam try, no 📢 / void	De	fence
	2NT	support-limit raise OR 16+	4 Othe	r 4 <b>⊕</b> splinter, others cue	De	efence
1♥♠	1NT	5-9 points (over 1♥, not 4♠)	3♠	Strong- fit &/or good suit		
	2♣	10+ points, 3+ cards	3♦	Strong- fit &/or good suit		R
	2♦	10+ points, 3+ cards	3♥♠	pre-emptive raise		Ot
	2♥♠	3/4+ support, 7-9/5-9 points	3NT	13-15, balanced, support		U
	2NT	support-limit raise OR 16+	4 <b>≇</b> ♦	splinter (10-14 pts, 0 or 1 📣	De	efence
2♣	2♦	<1.5 HT OR no 5 card suit.	2♥♠	>= 1.5 HT, 5+ suit		,ichiec
	other	2NT bal, >= 1.5 HT; 3 <b>∉</b> 3♦>= 1	.5 HT, 5	5+ suit;3♥♠one-loser suit	Le	benso
2♦	27	<1.5 HT OR no 5 card suit.	3∉♦	>= 1.5 HT, 5+ suit		Ot
	2♠	>= 1.5 HT, 5+ suit	3♥♠	one-loser suit	Та	ke out
	2NT	Balanced, >= 1.5 HT	3NT	Solid minor (4 asks which)		
2♥♠	2NT	Ogust (suit qual & strength)	3NT	Play		
	3≇♦	5+ suit, forcing.	4 <b>∉</b> ♦	Cue		
	3♥♠	Play (not invitational)	4♥♠	Play	Aft	er 2-o
2NT	3♣	Puppet Stayman	4 <b>♣</b>	Modified Gerber (repeat 🕭 for k	(s)	
	3♦	Flint	4♦			
	3♥	Natural & forcing	4♥	Play	11	T rebi
	3♠	Natural & forcing	4 <b>♠</b>	Play		
	3NT	Play	other		го	llowing

	CONVENTIONS
Additional resp	ponses to 1NT
3 <b>⊈</b> 3♦	5+ cards, slam try
3♥3♠	5+ cards, slam try
4 <b>♠</b>	Gerber (responses as per our modified Blackwood)
4♦	
4♥	Play
4♠	Play
Unusual NT:	minors other suits lower 2 unbid suits
other m	inors over Major, minor + Major over minor
Other slam bid	lding Cue Bids 🗹 Asking Bids 🗆
4th Suit Forcin	
NT Checkback	
Defence to 3NT	
Defence to ope	
Defence to ope	ening 2-s: Multi $X = 4+ (maybe balanced), 2NT 16-19$
RCO styl	le 2-s If their suit is natural, double is takeout.
	If their suit may be artifical, double shows that suit.
Other 2-s	
Other 2-8	
D. (	If their suit may be artifical, double shows that suit.
Defence to stro	
	Jump overcalls (2+to 3+) are 5/5 weakish (depends on vul)
Lebensohl	Over NT interference
Other use	
Take out of 4 le	evel pre-empts 444 x values
	4♥ x "values+" 4♠ x takeout
	OTHER NOTES

## OTHER NOTES

After 2-over-1 response:

3NT rebid shows 15-16, 4/2 in own/partner's suits 2NT rebid shows extra Raising partners suit (to 3 level) shows 15+, 5/3 in own/partner's suits rebid is 15-17; 2NT is 18+ owing interference over 1NT opening or 1NT overcall, suit bid is natural & forward

		BASIC RESPONSES	
Jump raises	- minors limit	forcing  other	
Jump raises	- majors limit	other	
Jump shifts	after minor open	ning Strong, 15/16+ and good suit quality	
Jump shifts	after major open	ning Strong, 15/16+ and good suit quality	
Responses t	to strong 2 suit c	opening Steps over 2C	
Responses t	to 2NT opening	Stayman, Transfers (3D, 3H). 3S = 5S, 4H	
		PLAY CONVENTIONS	
'NT' \	/ersus Notrump	o 'S' Versus Suit ✓= Both	
Sequence le	ads:	Overlead all 🗹 All except AK x (x)	
	Underlead	other Ace for Attitude King for count	
Four or more	e with an honour	ır 4th highest 🗹 attitude 🗔	
3	rd/5th	other	
From 4 smal	ll 2nd hig	ghest 🗹 other	
From 3 card	s (no honour	ır) top 🗔 middle 🗹 bottom 🗔	
Signal on	partner's lead:	high encourage 🔲 low encourage 🗹	
	other		
Signal on o	declarer's lead	Reverse count	
Discards	McKenney	🗹 high encourage 🔲 low encourage 🗌	
	odd/even	other First discard only	
Count	natural	reverse 🗹	

## **CONVENTIONS**

RKCB 🔽 Blackwood other Gerber when? Over natural NT opening or equivalent **Other Conventions** Lebensohl after 1NT <overcall>

Splinter Raises over major opening & responses

Truscott after 1<suit>: X

4NT:

4♠



©ABF Marketing PO Box 397 Fyshwick ACT 2609 Tel: 02 6239 2265 FAX: 02 6239 1816

			B		AUST	RALIA	AN BF		e fei Incof			
			Ś	STA	NDA	RD S	SYS	TEN		RD		
Name	es:	Davi	d Lusł	< - Su	e Phillips	6	PHIL	LIPS-	LUSK			
ABF	Nos:	1979	974									(
Basic	: Syster	n:	ACOL	_								
Class	sificatio	n:	Greer	ו 🗆	Blue	, 🗆	Re	d 🗹	Yell	ow		
					OF	PENI	NG	BID	S			
Desc	ribe stre	ength,	minim	num le	ength, or	specific	c mean	ing				Canape
1 <b>≜</b>	3+ 11-	20		1♦	4+ 11-2	20	1	4+	11-20		1♠	5+ 11-20
1 N 1	12-	14						n	nay cont	ain 5 c	ard r	najor
2€\$	Stayma	n:	simpl	e 🖌	7	exten	ded		othe	er		
trar	nsfers	2♦	> H	earts		27	> Sp	ades		24	Ba	aron
	2 NT	> Ei	ther m	inor	oth	ner 3	<suit></suit>	= Slan	n interes	t		
2♠	Strong	: At le	ast 8 p	olayin	g tricks o	or 21-22	baland	ced (or	r 25-26)			
2♦	Multi: \	Neak	(6-9) iı	n an u	Inspecifi	ed majo	or or 23	-24 (2	7-28), Ba	alance	d	
27	Multi: \	Neak	(6-9) 5	5-5+ ir	n hearts	and and	other (n	nay be	5-4 at fa	avoura	ble)	
2♠	Multi: \	Neak	(6-9) 5	5-5+ ir	n spades	and an	other (	may b	e 5-4 at	favour	able)	
2 NT	Wea	ık (6-1	0) 5-5	+ in m	ninors							

### PRE-ALERTS: CALLS THAT MAY HAVE UNEXPECTED **MEANING/S OR REQUIRE SPECIAL DEFENCE**

Gambling, solid minor, rarely contains an outside Ace or King.

# **COMPETITIVE BIDDING**

Negative doubles t	hrough	3S		Resp	ons	sive doubles the	nrough	3S
Jump overcalls	Weak		Unusu	al NT		5-5+ in unbid	denominatio	n
1NT overcall (imme	ediate)	15	-18		(re-	opening)	11 - 14/15	
Immed cue of mind	or	Other mi	nor and a	a majo	r, u	sually weakisl	ı	
Immed cue of major Other m			jor and a	or and a minor, usually weakish				
Over opponent's 1NT (weak)			Cappelletti					
Over opponent's 1	NT (stro	ng)	Cappel	Cappelletti				
Over weak twos			Х					
Over opening three	es		Х					

Copyright © BCC 6.3.17

3 NT

		RESPONSES TO (	OPEN	ING BIDS			
		Describe strength, minimum lengt	h or spe	cific meaning	A	dditional re	spon
1 <b>≜</b>	1♦	5/6+ natural	2NT	16+, balanced, 3+ clubs		3 <b>⊈</b> 3♦	Sla
	1♥♠	5/6+ natural	3♠	Limit 10-12		3♥3♠	Sla
	1NT	8-10 balanced, no 4cM	3♦	Splinter		4 <b>♣</b>	Ge
	2♠	Limit 6-9	37	Splinter		4♦	Pre
	2♦	Forcing, 15/16+ good suit	3♠	Splinter		4♥	Na
	27	Forcing, 15/16+ good suit	3NT	4-3-3-3, 13-15, no 4cM		4 <b>♠</b>	Na
	2♠	Forcing, 15/16+ good suit	4 bids	Majors to play	U	nusual NT:	
1♦	1♥♠	5/6+ natural	3♣	Forcing, 15/16+ good suit		other	
	1NT	5-9 no 4cM	3•	Limit 10-12			
	2♠	9+ natural	3♥	Splinter	0	ther slam b	iddin
	2♦	Limit 6-9	3♠	Splinter	4	th Suit Forc	ing
	27	Forcing, 15/16+ good suit	3NT	4-3-3-3, 13-15, no 4cM	N	T Checkbao	ck
	2♠	Forcing, 15/16+ good suit	4♦	Very strong	D	efence to 3	NT op
	2NT	16+, balanced, 3+ diamonds	4 Othe	r4C = Splinter 4M, to play	D	efence to o	penin
1♥♠	1NT	5-9	3♠	Forcing, 15/16+ good suit			+
	2♣	9+ natural	3♦	Economical jumps by passed h	and	RCO s	tyle 2-
	2♦	9+ natural	3♥♠	Limit 10-12		Other	2 0
	2♥♠	Limit 6-9	3NT	Balanced raise> 4		Other 2	2-5
	2NT	16+, balanced, 3+ support	4 <b>≇</b> ♦	Splinter	n l	efence to st	trona
2♣	2♦	Negative 0-1 control	2♥♠	Steps			aong
	other				L	ebensohl	
2♦	2♥	Pass/Correct	3 <b>≇</b> ♦	Forcing, natural		Other u	uses
	2♠	Pass/Correct, heart fit	3♥♠	Pass/Correct	Т	ake out of 4	level
	2NT	Enquiry, 3C = H, 3D = S, max	3NT	To play			
2♥♠	2NT	Enquiry for second suit	3NT	To play			
	3≇♦	Pass/Correct	4 <b>♣♦</b>	Pass/Correct			
	3♥♠	Raise, 4 card support	4♥♠	5 card suport, to play		ue raises a	
2NT	3♣	Preference	4 <b>♣</b>	Natural, preemptive	3,	4, 5 cards	withc
	3♦	Preference	4♦	Natural, preemptive			
	3♥	Forcing, natural	4♥	To play			
	3♠	Forcing, natural	4 <b>♠</b>	To play			
	3NT	To play	other				

		CC	ONVENTI	ONS			
dditional resp	oonses to	1NT					
3 <b>⊈</b> 3♦	Slam try	, natural					
3♥3♠	Slam try	, natural					
4♣	Gerber						
4♦	Preempt	ive					
4♥	Natural,	to play					
4 <b>♠</b>	Natural,	to play					
nusual NT:	mino	rs 🗆	other suits	$\checkmark$	lower 2	unbid suits	
other							
ther slam bid	ding	Cue Bi	ds 🗹				
th Suit Forcin	g (	One round	🗹 GF at t	hree leve	I	Game force	
T Checkback	$\checkmark$	Priori	ities Major	fits			
efence to 3N	r opening	X =	values				
efence to ope	ening 2-s:	Multi	X = T/O, 2	2NT natu	ral		
		Two doub	les take-out,	susequer	nt Xs penal	ty	
RCO styl	e 2-s						
Other 2-s	6	Over 2NT	, minors, 3C	shows lor	nger H, 3D	shows longer	S
efence to stro	ong 🕭	X = 4-5+ I	H and a mino	r. 1D = 4-	5+ S and a	a minor, 1H/S	natur
			5+ <majors or<="" th=""><th></th><th></th><th></th><th></th></majors>				
ebensohl	Ov	er NT interf	erence	7			
Other us							
ake out of 4 le		•	4 <b>∯</b> 4♦	Х			
	4♥	X = values	s 4♠ X	= values			

# **OTHER NOTES**

Cue raises apply after our side has overcalled. Non-cue raises show appropriate supp 3, 4, 5 cards without promising any specific high card strength.

BA	SIC	KE	SPO	NSES	5		
Jump raises - minors limit	for	cing		other			
Jump raises - majors limit	for	cing		other			
Jump shifts after minor opening		Gam	e force				
Jump shifts after major opening		Gam	e force				
Responses to strong 2 suit opening		2♦ne	gative				
Responses to 2NT opening	3 mir	nor - to	play; 3	major for	cing, natu	ral	

## **PLAY CONVENTIONS**

'NT' Versus Notrump	'S' Versus Suit	✓ <sub>= Both</sub>
Sequence leads:	Overlead all	All except AK x (x)
Underlead	other	
Four or more with an honour	4th highest 🗹	attitude
3rd/5th 🔲 d	other	
From 4 small 2nd highest	t other	
From 3 cards (no honour)	top 🔲 middle	🗹 bottom 🗔
Signal on partner's lead: h	igh encourage 🛛 🗹	low encourage
other		
Signal on declarer's lead	Natural count (if appropriate	e)
Discards McKenney	high encourage	Z low encourage
odd/even	other	
Count natural	reverse	

# CONVENTIONS

other

RKCB 🔽 Blackwood 4NT: Gerber **v** when? Over No trumps only 44 Other Conventions

#### Over 2 /2 and 2NT rebid:

3 is puppet Stayman

Over other 2NT rebids  $3 \neq / 3 \neq =$  checkback



©ABF Marketing PO Box 397 Fyshwick ACT 2609 Tel: 02 6239 2265 FAX: 02 6239 1816

		AUSTRALIA				
	ST	ANDARD S	YSTEM	CARD		
Names:	Bob Clarke and	d David Parrott				
ABF Nos:						(
Basic System	n: Acol					
Classification	i: Green 🗆	Blue 🗹	Red 🛛	Yellow		
		OPENI	NG BIDS	;		
Describe stre	ength, minimum	length, or specific	meaning			Canape
1 3+ 11-2	20 1 🔶	4+ 11-20	1♥ 4+ 11	-20	1♠	5+ 11-20
<b>1 NT</b> 12-1	4	_	ma	y contain 5	card r	major
2 <b>≜</b> Staymar	n: simple	extend	led 🗆	other		

2 Baron

#### transfers 2♦ To 2♥ 2♥ To 2♠ 2 NT To 3♣/ 3♦ other

- 2♣ 81/2+ playing tricks in a major or 22+
- 6 in either major 6-10 or 20-21 balanced or 81/2 tricks in a minor 2♦
- 27 5+ hearts and 5+ other 6-10

A Da

- 5+ spades and 5+ minor 6-10 2♠
- 2 NT 5/5 minors 6-10
- 3 NT gambling

### PRE-ALERTS: CALLS THAT MAY HAVE UNEXPECTED **MEANING/S OR REQUIRE SPECIAL DEFENCE**

#### **COMPETITIVE BIDDING** 3♠ 4 Negative doubles through Responsive doubles through Jump overcalls weak Unusual NT S.A. Michaels 15-18 (re-opening) 10-14 1NT overcall (immediate) S.A. Michaels - shows other minor plus a major Immed cue of minor S.A. Michaels - shows other major plus a minor Immed cue of major Over opponent's 1NT (weak) transfers Over opponent's 1NT (strong) Transfers Double Over weak twos Over opening threes Double

Copyright © BCC 6.3.17

		RESPONSES TO C Describe strength, minimum lengt			:د: ام ۸
1.	1				Addition
1 <b>≜</b>	1♦ 1 <b>♥</b> ♠	6+ points / length 4+	2NT 3 <b></b> ♠	16 + points /4+ ♣	34
	1 <b>\_</b>	6+ points / length 4+ 6-9 points balanced	3 <b></b> €	10-12 points / 4+ ♣ Splinter	4
	2	6-9 points / length 4+	3 <b>♥</b>	Splinter	4
	2 <b>∞</b> 2♦	16 + points	3 <b>∳</b>	Splinter	4
	2♥	16 + points	3NT	13-15 balanced /4+ ♠	4
	2 <b>4</b>	16 + points		4epreemptive; others = void	Unusual
1•	1♥♠		3♣		onusual
1	1 <b>\</b>	6+ points / length 4+	3 <b>◆</b>	16 + points	
	2 <b>♠</b>	6-9 points balanced	3▼ 3▼	10-12 points / 4+ ♦	Other sla
	2 <b>•</b>	10+ points		Splinter	4th Suit
	2 <b>•</b> 2 <b>•</b>	6-9 points / length 4+	3 <b>≙</b> 3NT	Splinter	NT Chec
	2▼ 2♠	16 + points	3NT 4♦	13-15 balanced / 4+ •	Defence
	2 <b></b> 2NT	16 + points 16 + points /4+ ♦		preemptive raise 4 <b>e</b> splinter; 4 <b>♥</b> / 4 <b>e</b> = void	Defence
4					
1♥♠	1NT	6-9 points balanced	3 <b>≜</b>	16 + points	R
	2 <b>♣</b>	10+ points	3 <b>♦</b>	16 + points	
	2♦ 2♥♠	10+ points	3 <b>∜</b> ≜ 2NT	10-12 / length 4	O
	2 <b>9</b>	6-9 points / length 3+	3NT 4 <b>⊈</b> ♦	13-15 points /4+ ♥▲balanced	
		16 + points /4+ <b>∜</b> ♠		Splinter	Defence
2♠	2♦	Negative < 7 points	2♥♠	7 + points / length 5+	
	other	2NT 8-10 balanced			Lebenso
2♦	27	Pass or correct	3∉♦	Natural and Forcing	O
	2♠	Pass or correct	3♥♠	Pass or correct	Take ou
	2NT	Asking bid	3NT	To play	
2♥♠	2NT	Asking Bid	3NT	To play	
	3≇♦	Lowest = P/Corr ; other forcing	4 <b>∯♦</b>	Splinter	-
	3♥♠	To play	4♥♠	To play	Transfer
2NT	3♣	To play	4 <b>♠</b>	Invitational	2 <b>♦</b> = 5+ <b>♥</b>
	3♦	To play	4♦	Invitational	2♥= 5+
	3♥	Forcing and natural	4♥	Splinter	
	3♠	Forcing and natural	4 <b>♠</b>	Splinter	NT chec
	3NT	To play	other		3 bids =

CONVENTIONS								
Additional responses to 1NT								
3 <b>⊈</b> 3♦	Strong/natural - slam interest							
3♥3♠	Strong/natural - slam interest							
4 <b>♣</b>	Gerber							
4♦	Preemptive							
4♥	To play							
4 <b>≜</b>	To play							
Jnusual NT: minc		ors 🗆	other su	uits 🗆	lower 2		unbid suits	
other Michaels - over ≇♦shows majors ; over ♥♠shows minors								
			_					
Other slam bidding Cue Bids 🗹 Asking Bids 🗆								
4th Suit Forcing         One round         Image: Constraint of the second secon								
NT Checkback Z Priorities See below								
Defence to 3NT opening								
Defence to opening 2-s: Multi Double for take out								
RCO style 2-s		Double for take out						
Other 2-s		Double for take out						
		Over 2NT(minors) 3♣T/O-longer ♥, 3♠T/O-longer ♠						
Defence to stro		Double=♥+minor ;1 <b>↓−</b> ⊕+minor ; 1NT= majors or minors						
			e defence over strong 2♣					
Lebensohl	Over NT interference							
Other uses Over double of opponent's weak 2 bids								
Take out of 4 level pre-empts					uble			
	47	4 NT	4♠	4 NT				

# **OTHER NOTES**

Transfers over 1NT: 2 = 5 + 4 or 5 + 4 or 4 + 1 in both majors 2 = 5 + 7 or  $2 \sqrt{2} \sqrt{2} = 5 + 4$  and  $4 \sqrt{2}$  and game interest  $2 \sqrt{2} = 5 + 4$ ; 2 = 5 + 4 and 4; 3 = 5 + 4 and 7; 3 = 5 + 4 and 7